Why Chatbots Fail

Can you teach entrepreneurship? Do you dare to dream and scale your venture beyond your home country? How do you source deals—through warm introductions or AI? Can open innovation be sincere or is it bound to be "innovation theater"? This book is a collection of Voice of FinTech podcast highlights and additional resources, explained and woven together by Rudolf Falat. Voice of FinTech podcast was founded by Rudolf Falat, senior corporate finance professional with extensive experience in financial services, based in Zurich, Switzerland, in June 2019. FinTech and technology enthusiast, start-up mentor, adviser, business angel, and executive education coach. It's a weekly interview with FinTech founders and key players in the FinTech ecosystem in Switzerland and Europe. Educational and inspirational! Are you looking to see how others have made it? How to avoid their mistakes? Who can help you in terms of advice, funding or opening doors? Which are the best start-ups to invest in or to partner up? Voice of FinTech is here for you! "I see a tremendous spirit of entrepreneurship taking off in Europe; great new companies will come from Europe, or anywhere on the planet, not just the United States." Geoff Ralston, President of Y Combinator on Voice of FinTech podcast

This world first summary of the evolution of 2D chatbots in websites, backends of portals and social media apps, and conversationally advanced 3D mixed reality cognitive interfaces, serves several purposes. It dissects some of the best-known case studies to emerge from the past two decades of tech giants launching the best chatbot, or supposedly the smartest, intelligent virtual assistant. From Microsoft's Tay.ai to London's Eugene

Goostman claim to turing test fame, from the market dominating Amazon Alexa to Gatebox's IoT innovation with its multi-cloned Japanese hologram girlfriend, this is the first ever history of bots. This book also touches on the Trump vs Clinton chatbot wars as well as the UK Labour Party's dating site stunt, including references made to Facebook Messenger bots and the impact of the Cambridge Analytica scandal. Included in the book is a hands-on checklist and guidelines in for people wanting to buy or licence bots for their companies and organizations. The author also outlines the possible use cases and key issues to consider when sourcing and commissioning your first botification project, with the final chapters predicting where the future development – and development traps – might lie.

The eight-volume set LNCS 13375 – 13382 constitutes the proceedings of the 22nd International Conference on Computational Science and Its Applications, ICCSA 2022, which was held in Malaga, Spain during July 4 – 7, 2022. The first two volumes contain the proceedings from ICCSA 2022, which are the 57 full and 24 short papers presented in these books were carefully reviewed and selected from 279 submissions. The other six volumes present the workshop proceedings, containing 285 papers out of 815 submissions. These six volumes includes the proceedings of the following workshops: Advances in Artificial Intelligence Learning Technologies: Blended Learning, STEM, Computational Thinking and Coding (AAILT 2022); Workshop on Advancements in Applied Machine-learning and Data Analytics (AAMDA 2022); Advances in information Systems and Technologies for Emergency management, risk assessment and mitigation based on the Resilience (ASTER 2022); Advances in Web Based Learning (AWBL 2022); Blockchain and

Distributed Ledgers: Technologies and Applications (BDLTA 2022); Bio and Neuro inspired Computing and Applications (BIONCA 2022); Configurational Analysis For Cities (CA Cities 2022); Computational and Applied Mathematics (CAM 2022), Computational and Applied Statistics (CAS 2022); Computational Mathematics, Statistics and Information Management (CMSIM); Computational Optimization and Applications (COA 2022); Computational Astrochemistry (CompAstro 2022); Computational methods for porous geomaterials (CompPor 2022); Computational Approaches for Smart, Conscious Cities (CASCC 2022); Cities, Technologies and Planning (CTP 2022); Digital Sustainability and Circular Economy (DiSCE 2022); Econometrics and Multidimensional Evaluation in Urban Environment (EMEUE 2022); Ethical AI applications for a human-centered cyber society (EthicAI 2022); Future Computing System Technologies and Applications (FiSTA 2022); Geographical Computing and Remote Sensing for Archaeology (GCRSArcheo 2022); Geodesign in Decision Making: meta planning and collaborative design for sustainable and inclusive development (GDM 2022); Geomatics in Agriculture and Forestry: new advances and perspectives (GeoForAgr 2022); Geographical Analysis, Urban Modeling, Spatial Statistics (Geog-An-Mod 2022); Geomatics for Resource Monitoring and Management (GRMM 2022); International Workshop on Information and Knowledge in the Internet of Things (IKIT 2022); 13th International Symposium on Software Quality (ISSQ 2022); Land Use monitoring for Sustanability (LUMS 2022); Machine Learning for Space and Earth Observation Data (MALSEOD 2022); Building multi-dimensional models for assessing complex environmental systems (MES 2022); MOdels and indicators for assessing and measuring the urban settlement deVElopment in the view of ZERO net land take by 2050

(MOVEto0 2022); Modelling Post-Covid cities (MPCC 2022); Ecosystem Services: nature's contribution to people in practice. Assessment frameworks, models, mapping, and implications (NC2P 2022); New Mobility Choices For Sustainable and Alternative Scenarios (NEMOB 2022); 2nd Workshop on Privacy in the Cloud/Edge/IoT World (PCEIoT 2022); Psycho-Social Analysis of Sustainable Mobility in The Pre- and Post-Pandemic Phase (PSYCHE 2022); Processes, methods and tools towards RESilient cities and cultural heritage prone to SOD and ROD disasters (RES 2022); Scientific Computing Infrastructure (SCI 2022); Socio-Economic and Environmental Models for Land Use Management (SEMLUM 2022); 14th International Symposium on Software Engineering Processes and Applications (SEPA 2022); Ports of the future - smartness and sustainability (SmartPorts 2022); Smart Tourism (SmartTourism 2022); Sustainability Performance Assessment: models, approaches and applications toward interdisciplinary and integrated solutions (SPA 2022); Specifics of smart cities development in Europe (SPEED 2022); Smart and Sustainable Island Communities (SSIC 2022); Theoretical and Computational Chemistryand its Applications (TCCMA 2022); Transport Infrastructures for Smart Cities (TISC 2022); 14th International Workshop on Tools and Techniques in Software Development Process (TTSDP 2022); International Workshop on Urban Form Studies (UForm 2022); Urban Regeneration: Innovative Tools and Evaluation Model (URITEM 2022); International Workshop on Urban Space and Mobilities (USAM 2022); Virtual and Augmented Reality and Applications (VRA 2022); Advanced and Computational Methods for Earth Science Applications (WACM4ES 2022); Advanced Mathematics and Computing Methods in Complex Computational Systems (WAMCM 2022).

This book presents a novel view of intelligence, and of the relationship between machine intelligence and human beings. From this perspective, machine intelligence is viewed as an artificial aid to human intelligence, and the two are seen to form a 'seamless web'.Having established this new perspective on intelligence, the book highlights some basic deficiencies of unaided human intelligence through case studies to show how human beings are capable of destroying existing intelligence networks as well as how they fail to recognize that such intelligence networks are needed. In many such cases, along with the other aspects of the problem, there is also a failure of discourse: bad arguments and the like dominate the discourse, and crucial aspects of the situation are overlooked or glossed over.The book then lays out a proposal on how to deal with this kind of problem — one that relies heavily on techniques developed in AI. This is done in the form of a new kind of grand challenge for AI, involving software monitors that are applied to discourse on major issues. All this is in keeping with the perspective on intelligence and AI presented in this book.

The Psychology of Artificial Superintelligence

An end-to-end practical guide to implementing NLP applications using the Python ecosystem

How the World's Fastest Growing Companies Use Chatbots to Generate Leads 24/7/365 (and How You Can Too)

14th International Conference on Design Science Research in Information Systems and Technology, DESRIST 2019, Worcester, MA, USA, June 4–6, 2019, Proceedings

Analyzing Digital Discourses

30th IFIP WG 6.1 International Conference, ICTSS 2018, Cádiz, Spain, October 1-3, 2018, Proceedings
2021 AMS Virtual Annual Conference and World Marketing Congress
End-User Development
Quality of Information and Communications Technology13th International Conference, QUATIC 2020, Faro, Portugal, September 9–11, 2020, ProceedingsSpringer Nature
This book constitutes the refereed proceedings of the 20th EPIA Conference on Artificial Intelligence, EPIA 2021, held virtually in September 2021. The 62 full papers and 6 short papers presented were carefully reviewed and selected from total of 108 submissions. The papers are organized in the following topical sect artificial intelligence and IoT in agriculture; artificial intelligence and law; artificia intelligence in medicine; artificial intelligence in power and energy systems; artificial intelligence in transportation systems; artificial life and evolutionary algorithms; ambient intelligence and affective environments; general AI; intelligen robotics; knowledge discovery and business intelligence; multi-agent systems: theory and applications; and text mining and applications.
For the 50th Anniversary of the Academy of Marketing Science, the 2021 AMS Annual Conference and Marketing World Congress celebrates the history of

marketing while also exploring its future. This includes research on possible new theory discoveries and findings that could lead to more efficient and impactful responses by marketers to the current multi-faceted global challenge array. The volume proposes that marketers strive to continue to offer value in a socially responsible way to the consumers within. Articles in this volume explore the influence of marketing innovations leveraged by the rising influence of artificial intelligence, virtual reality, mechanamorphics, a proliferation of data, changing economic power concentration, and a myriad of other factors. Founded in 1971, Academy of Marketing Science is an international organization dedicated to promoting timely explorations of phenomena related to the science of marketing theory, research, and practice. Among its services to members and the community at large, the Academy offers conferences, congresses, and symposia that attract delegates from around the world. Presentations from these events are published this Proceedings series, which offers a comprehensive archive of volumes reflec the evolution of the field. Volumes deliver cutting-edge research and insights, complementing the Academy's flagship journals, the Journal of the Academy of Marketing Science (JAMS) and AMS Review. Volumes are edited by leading scholars and practitioners across a wide range of subject areas in marketing sc Augmenting Neurological Disorder Prediction and Rehabilitation Using Artificial

Intelligence focuses on how the neurosciences can benefit from advances in AI, especially in areas such as medical image analysis for the improved diagnosis of Alzheimer's disease, early detection of acute neurologic events, prediction of str medical image segmentation for quantitative evaluation of neuroanatomy and vasculature, diagnosis of Alzheimer's Disease, autism spectrum disorder, and oth key neurological disorders. Chapters also focus on how AI can help in predicting stroke recovery, and the use of Machine Learning and AI in personalizing stroke rehabilitation therapy. Other sections delve into Epilepsy and the use of Machine Learning techniques to detect epileptogenic lesions on MRIs and how to unders neural networks. Provides readers with an understanding on the key applications artificial intelligence and machine learning in the diagnosis and treatment of the most important neurological disorders Integrates recent advancements of artific intelligence and machine learning to the evaluation of large amounts of clinical d for the early detection of disorders such as Alzheimer's Disease, autism spectrum disorder, Multiple Sclerosis, headache disorder, Epilepsy, and stroke Provides readers with illustrative examples of how artificial intelligence can be applied to outcome prediction, neurorehabilitation and clinical exams, including a wide rang of case studies in predicting and classifying neurological disorders
Conversational AI with Rasa

Agents and Artificial Intelligence
Public Health and Informatics
The Digital Transformation of Mental Healthcare
Build Better Chatbots
pHealth 2021
16th IFIP WG 12.5 International Conference, AIAI 2020, Neos Marmaras, Greece,
June 5–7, 2020, Proceedings, Part II
Implementing smart and efficient analytics using Cloud ML Engine
Artificial intelligence is creating huge opportunities for workplace learning and
employee development. However, it can be difficult for L&D professionals to
assess what difference AI can make in their organization and where it is best
implemented. Artificial Intelligence for Learning is the practical guide L&D
practitioners need to understand what AI is and how to use it to improve all
aspects of learning in the workplace. It includes specific guidance on how AI can
provide content curation and personalization to improve learner engagement,
how it can be implemented to improve the efficiency of evaluation, assessment
and reporting and how chatbots can provide learner support to a global
workforce. Artificial Intelligence for Learning debunks the myths and cuts through
the hype around AI allowing L&D practitioners to feel confident in their ability to

critically assess where artificial intelligence can make a measurable difference and where it is worth investing in. There is also critical discussion of how AI is an aid to learning and development, not a replacement as well as how it can be used to boost the effectiveness of workplace learning, reduce drop off rates in online learning and improve ROI. With real-world examples from companies who have effectively implemented AI and seen the benefits as well as case studies from organizations including Netflix, British Airways and the NHS, this book is essential reading for all L&D practitioners needing to understand AI and what it means in practice.

This proceedings book covers the theory, design and applications of computer networks, distributed computing and information systems. Today's networks are evolving rapidly, and there are several developing areas and applications. These include heterogeneous networking supported by recent technological advances in power wireless communications, along with silicon integration of various functionalities such as sensing, communications, intelligence and actuations, which is emerging as a critically important disruptive computer class based on a new platform, networking structure and interface that enables novel, low-cost and high-volume applications. However, implemeting these applications has sometimes been difficult due to interconnection problems. As such, different

networks need to collaborate, and wired and next-generation wireless systems need to be integrated in order to develop high-performance computing solutions to address the problems arising from these networks' complexities. This ebook presents the latest research findings, as well as theoretical and practical perspectives on the innovative methods and development techniques related to the emerging areas of information networking and applications

This book explores the psychological impact of advanced forms of artificial intelligence. How will it be to live with a superior intelligence? How will the exposure to highly developed artificial intelligence (AI) systems change human well-being? With a review of recent advancements in brain–computer interfaces, military AI, Explainable AI (XAI) and digital clones as a foundation, the experience of living with a hyperintelligence is discussed from the viewpoint of a clinical psychologist. The theory of universal solicitation is introduced, i.e. the demand character of a technology that wants to be used in all aspects of life. With a focus on human experience, and to a lesser extent on technology, the book is written for a general readership with an interest in psychology, technology and the future of our human condition. With its unique focus on psychological topics, the book offers contributions to a discussion on the future of human life beyond purely technological considerations.

This book constitutes the refereed proceedings of the Third International Workshop on Chatbot Research and Design, CONVERSATIONS 2019, held in Amsterdam, The Netherlands, in November 2019. The 18 revised full papers presented in this volume were carefully reviewed and selected from 31 submissions. The papers are grouped in the following topical sections: user and communication studies user experience and design, chatbots for collaboration, chatbots for customer service, and chatbots in education.
Build, test, and deploy AI-powered, enterprise-grade virtual assistants and chatbots
Flexible conversational interfaces with Amazon Alexa, Google Home, and Facebook Messenger
Testing Software and Systems
Chatbot Research and Design
Human-Centered AI
Digital Marketing Strategies for Value Co-creation
Practical Natural Language Processing
Ethics, Governance, and Policies in Artificial Intelligence
Learn best practices for building bots by focusing on the technological implementation and UX in this practical book.

You will cover key topics such as setting up a development environment for creating chatbots for multiple channels (Facebook Messenger, Skype, and KiK); building a chatbot (design to implementation); integrating to IFTT (If This Then That) and IoT (Internet of Things); carrying out analytics and metrics for chatbots; and most importantly monetizing models and business sense for chatbots. Build Better Chatbots is easy to follow with code snippets provided in the book and complete code open sourced and available to download. With Facebook opening up its Messenger platform for developers, followed by Microsoft opening up Skype for development, a new channel has emerged for brands to acquire, engage, and service customers on chat with chatbots. What You Will Learn Work with the bot development life cycle Master bot UX design Integrate into the bot ecosystem Maximize the business and monetization potential for bots Who This Book Is For Developers, programmers, and hobbyists who have basic programming knowledge. The book can be used by existing chatbot developers to gain a better understanding of analytics

and the business side of bots.

As voice interfaces and virtual assistants have moved out of the industry research labs and into the pockets, desktops and living rooms of the general public, a demand for a new kind of user experience (UX) design is emerging. Although the people are becoming familiar with Siri, Alexa, Cortana and others, their user experience is still characterized by short, command- or query-oriented exchanges, rather than longer, conversational ones. Limitations of the microphone and natural language processing technologies are only part of the problem. Current conventions of UX design apply mostly to visual user interfaces, such as web or mobile; they are less useful for deciding how to organize utterances, by the user and the virtual agent, into sequences that work like those of natural human conversation. This edited book explores the intersection of UX design, of both text- or voice-based virtual agents, and the analysis of naturally occurring human conversation (e.g., the Conversation Analysis, Discourse Analysis and Interactional Sociolinguistics literatures). It

contains contributions from researchers, from academia and industry, with varied backgrounds working in the area of human-computer interaction. Each chapter explores some aspect of conversational UX design. Some describe the design challenges faced in creating a particular virtual agent. Others discuss how the findings from the literatures of the social sciences can inform a new kind of UX design that starts with conversation.
Create conversational UIs using cutting-edge frameworks Key FeaturesBuild AI chatbots and voicebots using practical and accessible toolkitsDesign and create voicebots that really shine in front of humansWork with familiar appliances like Alexa, Google Home, and FB MessengerDesign for UI success across different industries and use casesBook Description We are entering the age of conversational interfaces, where we will interact with AI bots using chat and voice. But how do we create a good conversation? How do we design and build voicebots and chatbots that can carry successful conversations in in the real world? In this book, Rachel Batish introduces us

to the world of conversational applications, bots and AI. You'll discover how - with little technical knowledge - you can build successful and meaningful conversational UIs. You'll find detailed guidance on how to build and deploy bots on the leading conversational platforms, including Amazon Alexa, Google Home, and Facebook Messenger. You'll then learn key design aspects for building conversational UIs that will really succeed and shine in front of humans. You'll discover how your AI bots can become part of a meaningful conversation with humans, using techniques such as persona shaping, and tone analysis. For successful bots in the real world, you'll explore important use-cases and examples where humans interact with bots. With examples across finance, travel, and e-commerce, you'll see how you can create successful conversational UIs in any sector. Expand your horizons further as Rachel shares with you her insights into cutting-edge voicebot and chatbot technologies, and how the future might unfold. Join in right now and start building successful, high impact bots! What you will learnBuild your own AI voicebots and chatbotsUse familiar

appliances like Alexa, Google Home, and Facebook MessengerMaster the elements of conversational user interfacesKey design techniques to make your bots successfulUse tone analysis to deepen UI conversation for humansCreate voicebots and UIs designed for real-world situationsInsightful case studies in finance, travel, and e-commerceCutting-edge technology and insight into the future of AI botsWho this book is for This book is for you, if you want to deepen your appreciation of UI and how conversational UIs - driven by artificial intelligence - are transforming the way humans interact with computers, appliances, and the everyday world around us. This book works with the major UI toolkits available today, so you do not need a deep programming knowledge to build the bots in this book: a basic familiarity with markup languages and JavaScript will give you everything you need to start building cutting-edge conversational UIs. This book constitutes the thoroughly refereed proceedings of the 14th International Conference on Designing for a Digital and Globalized World, DESRIST 2019, held Worcester, MA, USA,

June 2019. The 20 revised full papers included in the volume were carefully reviewed and selected from 54 submissions. They are organized in the following topical sections: Design Science Research Theory and Methodology; Design Science Research Applications in Healthcare; Design Science Research Applications in Data Science; and Design Science Research Applications in Emerging Topics.
Artificial Intelligence/ Human Intelligence: An Indissoluble Nexus
Progress in Artificial Intelligence
Building an Enterprise Chatbot
9th International Conference, C&C 2021, Held as Part of the 23rd HCI International Conference, HCII 2021, Virtual Event, July 24–29, 2021, Proceedings, Part II
Artificial Intelligence Applications and Innovations
8th International Symposium, IS-EUD 2021, Virtual Event, July 6–8, 2021, Proceedings
13th International Conference, ICAART 2021, Virtual Event, February 4–6, 2021, Revised Selected Papers

Models and Approaches for Online Brand Communities

Real-time conversations turn leads into customers Conversational Marketing is the definitive guide to generating better leads and closing more sales. Traditional sales and marketing methods have failed to keep pace with the way modern, internet-savvy consumers purchase goods and services. Modern messaging apps, which allow for real-time conversations and instant feedback, have transformed the way we interact in our personal and professional lives, yet most businesses still rely on 20th century technology to communicate with 21st century customers. Online forms, email inquiries, and follow-up sales calls don't provide the immediacy that modern consumers expect. Conversational marketing and sales are part of a new methodology centered around real-time, one-on-one conversations with customers via chatbots and messaging. By allowing your business to communicate with customers in real time—when it's most convenient for them—conversational marketing improves the customer experience, generates more leads, and helps you convert more leads into customers. Conversational Marketing pioneers David Cancel and Dave Gerhardt explain how to: Merge inbound and outbound tactics into a more productive dialog with customers Integrate conversational marketing techniques into your existing sales and marketing workflow Face-to-face meetings, phone calls, and email exchanges remain important to customer relations, but adding a layer of immediate, individual conversation drives the customer experience—and sales—sky-high.

This book constitutes the refereed proceedings of the 13th International Conference on the Quality of Information and Communications Technology, QUATIC 2020, held in Faro, Portugal*, in September 2020. The 27 full papers and 12 short papers were carefully reviewed and selected from 81 submissions. The papers are organized in topical sections: quality aspects in machine learning, AI and data analytics; evidence-based software quality engineering; human and artificial intelligences for software evolution; process modeling, improvement and assessment; software quality education and training; quality aspects in quantum computing; safety, security and privacy; ICT verification and validation; RE, MDD and agile. *The conference was held virtually due to the COVID-19 pandemic.

Many books and courses tackle natural language processing (NLP) problems with toy use cases and well-defined datasets. But if you want to build, iterate, and scale NLP systems in a business setting and tailor them for particular industry verticals, this is your guide. Software engineers and data scientists will learn how to navigate the maze of options available at each step of the journey. Through the course of the book, authors Sowmya Vajjala, Bodhisattwa Majumder, Anuj Gupta, and Harshit Surana will guide you through the process of building real-world NLP solutions embedded in larger product setups. You'll learn how to adapt your solutions for different industry verticals such as healthcare, social media, and retail. With this book, you'll: Understand the wide spectrum of problem statements, tasks, and solution approaches within NLP Implement

and evaluate different NLP applications using machine learning and deep learning methods Fine-tune your NLP solution based on your business problem and industry vertical Evaluate various algorithms and approaches for NLP product tasks, datasets, and stages Produce software solutions following best practices around release, deployment, and DevOps for NLP systems Understand best practices, opportunities, and the roadmap for NLP from a business and product leader's perspective

This book constitutes the refereed proceedings of the 30th IFIP WG 6.1 International Conference on Testing Software and Systems, ICTSS 2018, held in Cádiz, Spain, in October 2018. The 8 regular and 6 short papers presented were carefully reviewed and selected from 29 submissions. ICTSS is a series of international conferences addressing the conceptual, theoretic, and practical problems of testing software systems, including communication protocols, services, distributed platforms, middleware, embedded- and cyber-physical-systems, and security infrastructures.

Computational Science and Its Applications – ICCSA 2022 Workshops

Artificial Intelligence By Example

Conversational Marketing

Extending the Boundaries of Design Science Theory and Practice

Malaga, Spain, July 4–7, 2022, Proceedings, Part V

How to use AI to Support Employee Development

12th International Conference, HCI International 2007, Beijing, China, July 22-27, 2007,

Proceedings, Part III
20th EPIA Conference on Artificial Intelligence, EPIA 2021, Virtual Event, September 7–9, 2021, Proceedings

In this book the reader will find a collection of 31 papers presenting different facets of Human Computer Interaction, the result of research projects and experiments as well as new approaches to design user interfaces. The book is organized according to the following main topics in a sequential order: new interaction paradigms, multimodality, usability studies on several interaction mechanisms, human factors, universal design and development methodologies and tools.

This book contributes to the scholarly debate on the forms and patterns of interaction and discourse in modern digital communication by probing some of the social functions that online communication has for its users. An array of experts and scholars in the field address a range of forms of social interaction and discourses expressed by users on social networks and in public media. Social functions are reflected through linguistic and discursive practices that are either those of 'convergence' or 'controversy' in terms of how the discourse participants handle interpersonal relations or how they construct meanings in discourses. In this sense, the book elaborates on some very central concerns in the area of digital discourse analysis that have been reported within the last decade from various methodological perspectives ranging from sociolinguistics and pragmatics to corpus linguistics. This edited collection will be of particular interest to scholars and

students in the fields of digital discourse analysis, pragmatics, sociolinguistics, social media and communication, and media and cultural studies.

Here is the third of a four-volume set that constitutes the refereed proceedings of the 12th International Conference on Human-Computer Interaction, HCII 2007, held in Beijing, China, in July 2007, jointly with eight other thematically similar conferences. It covers multimodality and conversational dialogue; adaptive, intelligent and emotional user interfaces; gesture and eye gaze recognition; and interactive TV and media.

This 2 volume-set of IFIP AICT 583 and 584 constitutes the refereed proceedings of the 16th IFIP WG 12.5 International Conference on Artificial Intelligence Applications and Innovations, AIAI 2020, held in Neos Marmaras, Greece, in June 2020.* The 70 full papers and 5 short papers presented were carefully reviewed and selected from 149 submissions. They cover a broad range of topics related to technical, legal, and ethical aspects of artificial intelligence systems and their applications and are organized in the following sections: Part I: classification; clustering - unsupervised learning -analytics; image processing; learning algorithms; neural network modeling; object tracking - object detection systems; ontologies - AI; and sentiment analysis - recommender systems. Part II: AI ethics - law; AI constraints; deep learning - LSTM; fuzzy algebra - fuzzy systems; machine learning; medical - health systems; and natural language. *The conference was held virtually due to the COVID-19 pandemic.

Proceedings of MIE 2021

Introducing Azure Bot Service
Quality of Information and Communications Technology
Hands-On Machine Learning on Google Cloud Platform
My Trip to the Start-Up World
13th International Conference, QUATIC 2020, Faro, Portugal, September 9–11, 2020, Proceedings
Third International Workshop, CONVERSATIONS 2019, Amsterdam, The Netherlands, November 19–20, 2019, Revised Selected Papers

A pointed look at the state of tech-based mental healthcare and what we must do to change it Proponents of technology trumpet it as the solution to the massive increase in the mental distress that confronts our nation. They herald the arrival of algorithms, intelligent chatbots, smartphone applications, telemental healthcare services, and more⬜but are these technological fixes really as good as they seem? In Therapy Tech, Emma Bedor Hiland presents the first comprehensive study of how technology has transformed mental healthcare, showing that this revolution can⬜t deliver what it promises. Far from providing a solution, technological mental healthcare perpetuates preexisting disparities while relying on the same failed focus on personal responsibility that has let us down before. Through vivid, in-depth case studies, Therapy Tech reveals these problems, covering issues including psychosurveillance on websites like Facebook and 7 Cups of Tea, shortcomings of popular AI ⬜doctors on demand⬜ like Woebot, Wysa, and Joy, and even how therapists are being conscripted into the gig

economy. Featuring a vital coda that brings Therapy Tech up to date for the COVID era, this book is the first to give readers a large-scale analysis of mental health technologies and the cultural changes they have enabled. Both a sobering dissection of the current state of mental health and a necessary warning of where things are headed, Therapy Tech makes an important assertion about how to help those in need of mental health services today.

For several years now, both eHealth applications and digitalization have been seen as fundamental to the new era of health informatics and public health. The current pandemic situation has also highlighted the importance of medical informatics for the scientific process of evidence-based reasoning and decision making at all levels of healthcare. This book presents the accepted full papers, short papers, and poster papers delivered as part of the 31st Medical Informatics in Europe Conference (MIE 2021), held virtually from 29-31 May 2021. MIE 2021 was originally due to be held in Athens, Greece, but due to the continuing pandemic situation, the conference was held as a virtual event. The 261 papers included here are grouped into 7 chapters: biomedical data, tools and methods; supporting care delivery; health and prevention; precision medicine and public health; human factors and citizen centered digital health; ethics, legal and societal aspects; and posters. Providing a state-of-the-art overview of medical informatics from around the world, the book will be of interest to all those working with eHealth applications and digitalization to improve the delivery of healthcare today.

Understand the fundamentals and develop your own AI solutions in this updated edition packed with many new examples Key FeaturesAI-based examples to guide you in designing and implementing machine intelligenceBuild machine intelligence from scratch using artificial intelligence examplesDevelop machine intelligence from scratch using real artificial

intelligenceBook Description AI has the potential to replicate humans in every field. Artificial Intelligence By Example, Second Edition serves as a starting point for you to understand how AI is built, with the help of intriguing and exciting examples. This book will make you an adaptive thinker and help you apply concepts to real-world scenarios. Using some of the most interesting AI examples, right from computer programs such as a simple chess engine to cognitive chatbots, you will learn how to tackle the machine you are competing with. You will study some of the most advanced machine learning models, understand how to apply AI to blockchain and Internet of Things (IoT), and develop emotional quotient in chatbots using neural networks such as recurrent neural networks (RNNs) and convolutional neural networks (CNNs). This edition also has new examples for hybrid neural networks, combining reinforcement learning (RL) and deep learning (DL), chained algorithms, combining unsupervised learning with decision trees, random forests, combining DL and genetic algorithms, conversational user interfaces (CUI) for chatbots, neuromorphic computing, and quantum computing. By the end of this book, you will understand the fundamentals of AI and have worked through a number of examples that will help you develop your AI solutions. What you will learnApply k-nearest neighbors (KNN) to language translations and explore the opportunities in Google TranslateUnderstand chained algorithms combining unsupervised learning with decision treesSolve the XOR problem with feedforward neural networks (FNN) and build its architecture to represent a data flow graphLearn about meta learning models with hybrid neural networksCreate a chatbot and optimize its emotional intelligence deficiencies with tools such as Small Talk and data loggingBuilding conversational user interfaces (CUI) for chatbotsWriting genetic algorithms that optimize deep learning neural networksBuild quantum

computing circuitsWho this book is for Developers and those interested in AI, who want to understand the fundamentals of Artificial Intelligence and implement them practically. Prior experience with Python programming and statistical knowledge is essential to make the most out of this book.

My autobiography is a record of my life and interactions with many interesting people over the course of my work. This involved key industries and organisations like Keppel Corp, Wearnes, Natsteel, SPH, UOB, LTA, JTC, and SSO. Having the good fortune to meet many prominent Singaporeans such as Tan Chin Tuan, Wee Cho Yaw as well as Mr Lee Kuan Yew, Dr Goh Keng Swee, Dr Toh Chin Chye, Mr Lim Kim San and SR Nathan, allowed me not only a good perspective of various industries and businesses but also how some of these eminent statesmen think. They moulded my view of life.I've also gone through a wide range of experiences from changes in governments, impact of technology on our daily lives, changes in entertainment media to various life-threatening crises.I hope this unique compendium would be of interest to younger readers, growing up in a new and different world, but knowing how we got here, and why.

Uses and Risks of Business Chatbots
Human-Computer Interaction. HCI Intelligent Multimodal Interaction Environments
Acquire advanced AI, machine learning, and deep learning design skills, 2nd Edition
Human-Computer Interaction
Proceedings of the 34th International Conference on Advanced Information Networking and Applications (AINA-2020)
Studies in Conversational UX Design

Voicebot and Chatbot Design
Responsible Digital Health

See how custom chatbots and Azure Bot Service can resolve common business problems. This book takes you through the many possibilities of bot development from a business point of view, using Microsoft bot technology, and demonstrates how to connect, deploy, and manage them. Starting with an introduction to chatbots and their features you will go through the design and implementation of Azure chatbots. This will set the foundation for the rest of the book before you learn how to create and manage messages in chatbots. You'll then see how to deploy your chatbot in different business scenarios and how to integrate Azure chatbots with different applications such as Facebook and Twitter. To really allow you to demonstrate business value, Introducing Azure Bot Service covers tips on enhancing customer satisfaction and developing insights by analyzing customer behavior. This knowledge will help you understand how artificial intelligence techniques such as chatbots help your organization undergo digital transformation. After reading this book, you will be ready to build chatbots using Microsoft Azure, deploy them in different business scenarios, and measure the benefits of chatbots. What You Will Learn Build time-saving chatbots using Azure Bot Service Engage in proactive customer interaction Integrate chatbots as a key aspect of your business strategy Improve customer

satisfaction Ease into digital transformation using Azure chatbots Who This Book Is For Developers who are interested in building chatbots.
This book offers a synthesis of investigations on the ethics, governance and policies affecting the design, development and deployment of artificial intelligence (AI). Each chapter can be read independently, but the overall structure of the book provides a complementary and detailed understanding of some of the most pressing issues brought about by AI and digital innovation. Given its modular nature, it is a text suitable for readers who wish to gain a reliable orientation about the ethics of AI and for experts who wish to know more about specific areas of the current debate.
This book constitutes the proceedings of the 8th International Conference on End-User Development, IS-EUD 2021, held in July 2021. Due to COVID-19 pandemic the conference was held virtually. The paper track received 26 submissions, of which 11 full and 4 short papers were selected after a rigorous double-blind review process. The papers focus on "Democratizing AI development", namely on EUD for AI-based systems, where end users are called-on to become end-user developers of intelligent agents, digital twins, collaborative systems and social robots.
Explore the adoption of chatbots in business by focusing on the design, deployment, and continuous improvement of chatbots in a business, with a

single use-case from the banking and insurance sector. This book starts by identifying the business processes in the banking and insurance industry. This involves data collection from sources such as conversations from customer service centers, online chats, emails, and other NLP sources. You'll then design the solution architecture of the chatbot. Once the architecture is framed, the author goes on to explain natural language understanding (NLU), natural language processing (NLP), and natural language generation (NLG) with examples. In the next sections, you'll design and implement the backend framework of a typical chatbot from scratch. You will also explore some popular open-source chatbot frameworks such as Dialogflow and LUIS. The authors then explain how you can integrate various third-party services and enterprise databases with the custom chatbot framework. In the final section, you'll discuss how to deploy the custom chatbot framework on the AWS cloud. By the end of Building an Enterprise Chatbot, you will be able to design and develop an enterprise-ready conversational chatbot using an open source development platform to serve the end user. What You Will LearnIdentify business processes where chatbots could be usedFocus on building a chatbot for one industry and one use-case rather than building a ubiquitous and generic chatbot Design the solution architecture for a chatbotIntegrate chatbots with internal data sources using APIsDiscover the differences between natural language understanding

(NLU), natural language processing (NLP), and natural language generation (NLG) Work with deployment and continuous improvement through representational learning Who This Book Is ForData scientists and enterprise architects who are currently looking to deploy chatbot solutions to their business.

Therapy Tech

Cham Tao Soon: Life At Speed

Advanced Information Networking and Applications

Celebrating the Past and Future of Marketing and Discovery with Social Impact

aka Voice of FinTech, Season 1

Artificial Intelligence for Learning

Guidelines for Purchasers in the Public and Private Sectors

Building Bots for Business

Unleash Google's Cloud Platform to build, train and optimize machine learning models Key Features Get well versed in GCP pre-existing services to build your own smart models A comprehensive guide covering aspects from data processing, analyzing to building and training ML models A practical approach to produce your trained ML models and port them to your mobile for easy access Book Description Google Cloud Machine Learning Engine combines the services of Google Cloud Platform with the power and flexibility of TensorFlow. With this book, you will not only learn to build and train different complexities of machine learning models at scale but also host them in the cloud to make predictions. This book is focused on making the most of the Google Machine Learning

Platform for large datasets and complex problems. You will learn from scratch how to create powerful machine learning based applications for a wide variety of problems by leveraging different data services from the Google Cloud Platform. Applications include NLP, Speech to text, Reinforcement learning, Time series, recommender systems, image classification, video content inference and many other. We will implement a wide variety of deep learning use cases and also make extensive use of data related services comprising the Google Cloud Platform ecosystem such as Firebase, Storage APIs, Datalab and so forth. This will enable you to integrate Machine Learning and data processing features into your web and mobile applications. By the end of this book, you will know the main difficulties that you may encounter and get appropriate strategies to overcome these difficulties and build efficient systems. What you will learn Use Google Cloud Platform to build data-based applications for dashboards, web, and mobile Create, train and optimize deep learning models for various data science problems on big data Learn how to leverage BigQuery to explore big datasets Use Google's pre-trained TensorFlow models for NLP, image, video and much more Create models and architectures for Time series, Reinforcement Learning, and generative models Create, evaluate, and optimize TensorFlow and Keras models for a wide range of applications Who this book is for This book is for data scientists, machine learning developers and AI developers who want to learn Google Cloud Platform services to build machine learning applications. Since the interaction with the Google ML platform is mostly done via the command line, the reader is supposed to have some familiarity with the bash shell and Python scripting. Some understanding of machine learning and data science concepts will be handy

In Human-Centered AI, Professor Ben Shneiderman provides an optimistic realist's guide to how artificial intelligence can be used to augment and enhance humans' lives.

Create next-level AI assistants and transform how customers communicate with businesses with the power of natural language understanding and dialogue management using Rasa Key FeaturesUnderstand the architecture and put the underlying principles of the Rasa framework to practiceLearn how to quickly build different types of chatbots such as task-oriented, FAQ-like, and knowledge graph-based chatbotsExplore best practices for working with Rasa and its debugging and optimizing aspectsBook Description The Rasa framework enables developers to create industrial-strength chatbots using state-of-the-art natural language processing (NLP) and machine learning technologies quickly, all in open source. Conversational AI with Rasa starts by showing you how the two main components at the heart of Rasa work – Rasa NLU (natural language understanding) and Rasa Core. You'll then learn how to build, configure, train, and serve different types of chatbots from scratch by using the Rasa ecosystem. As you advance, you'll use form-based dialogue management, work with the response selector for chitchat and FAQ-like dialogs, make use of knowledge base actions to answer questions for dynamic queries, and much more. Furthermore, you'll understand how to customize the Rasa framework, use conversation-driven development patterns and tools to develop chatbots, explore what your bot can do, and easily fix any mistakes it makes by using interactive learning. Finally, you'll get to grips with deploying the Rasa system to a production environment with high performance and high scalability and cover best practices for building an efficient and robust chat system. By the end of this book, you'll be able to build and deploy your own chatbots using Rasa, addressing the common pain points encountered in the chatbot life cycle. What you will learnUse the response selector to handle chitchat and FAQsCreate custom actions using the Rasa SDKTrain Rasa to handle complex named entity recognitionBecome skilled at building custom components in the Rasa frameworkValidate and test dialogs end to end in RasaDevelop and refine a

chatbot system by using conversation-driven deployment processingUse TensorBoard for tuning to find the best configuration optionsDebug and optimize dialogue systems based on RasaWho this book is for This book is for NLP professionals as well as machine learning and deep learning practitioners who have knowledge of natural language processing and want to build chatbots with Rasa. Anyone with beginner-level knowledge of NLP and deep learning will be able to get the most out of the book. Build end-to-end industrial-strength NLP models using advanced morphological and syntactic features in spaCy to create real-world applications with ease Key FeaturesGain an overview of what spaCy offers for natural language processingLearn details of spaCy's features and how to use them effectivelyWork through practical recipes using spaCyBook Description spaCy is an industrial-grade, efficient NLP Python library. It offers various pre-trained models and ready-to-use features. Mastering spaCy provides you with end-to-end coverage of spaCy's features and real-world applications. You'll begin by installing spaCy and downloading models, before progressing to spaCy's features and prototyping real-world NLP apps. Next, you'll get familiar with visualizing with spaCy's popular visualizer displaCy. The book also equips you with practical illustrations for pattern matching and helps you advance into the world of semantics with word vectors. Statistical information extraction methods are also explained in detail. Later, you'll cover an interactive business case study that shows you how to combine all spaCy features for creating a real-world NLP pipeline. You'll implement ML models such as sentiment analysis, intent recognition, and context resolution. The book further focuses on classification with popular frameworks such as TensorFlow's Keras API together with spaCy. You'll cover popular topics, including intent classification and sentiment analysis, and use them on popular datasets and interpret the classification results. By the end of this book, you'll be able to confidently use spaCy, including its linguistic features, word

vectors, and classifiers, to create your own NLP apps. What you will learnInstall spaCy, get started easily, and write your first Python scriptUnderstand core linguistic operations of spaCyDiscover how to combine rule-based components with spaCy statistical modelsBecome well-versed with named entity and keyword extractionBuild your own ML pipelines using spaCyApply all the knowledge you've gained to design a chatbot using spaCyWho this book is for This book is for data scientists and machine learners who want to excel in NLP as well as NLP developers who want to master spaCy and build applications with it. Language and speech professionals who want to get hands-on with Python and spaCy and software developers who want to quickly prototype applications with spaCy will also find this book helpful. Beginner-level knowledge of the Python programming language is required to get the most out of this book. A beginner-level understanding of linguistics such as parsing, POS tags, and semantic similarity will also be useful.

Augmenting Neurological Disorder Prediction and Rehabilitation Using Artificial Intelligence
Between Convergence and Controversy
Work with Protected Enterprise Data Using Open Source Frameworks
Mastering spaCy
A Comprehensive Guide to Building Real-World NLP Systems
A Complete Guide to Getting Started with Chatbots
Culture and Computing. Design Thinking and Cultural Computing

The two-volume set LNCS 12794-12795 constitutes the refereed proceedings of the 9th International Conference on Culture and Computing, C&C 2021, which was held as part of HCI International

2021 and took place virtually during July 24-29, 2021. The total of 1276 papers and 241 posters included in the 39 HCII 2021 proceedings volumes was carefully reviewed and selected from 5222 submissions. The papers included in the HCII-C&C volume set were organized in topical sections as follows: Part I: ICT for cultural heritage; technology and art; visitors' experiences in digital culture; Part II: Design thinking in cultural contexts; digital humanities, new media and culture; perspectives on cultural computing.