

ADA's Algorithm: How Lord Byron's Daughter ADA Lovelace Launched The Digital Age

New, in the My First Little People, Big Dreams series: Introduce your littllest one to the world's first computer programmer, Ada Lovelace. Told in simple sentences, this young reader edition of the best-selling series is perfect to read out loud to little dreamers. This empowering series celebrates the important life stories of wonderful women of the world - and is now available in a board format for little hands! These books make the lives of these role models accessible for the youngest children, providing a powerful message to inspire the next generation of outstanding people who will change the world!

ALA NOTABLE BOOK AMELIA BLOOMER TOP TEN BOOK "Stanley has been delighting and informing readers with her biographies for years, and here, her considerable talents are once again on display...Hartland's charmingly busy art, reminiscent of Maira Kalman's work, is full of wit." —Booklist (starred review) From nonfiction stars Diane Stanley and Jessie Hartland comes a beautifully illustrated biography of Ada Lovelace, who is known as the first computer programmer. Two hundred years ago, a daughter was born to the famous poet, Lord Byron, and his mathematical wife, Annabella. Like her father, Ada had a vivid imagination and a creative gift for connecting ideas in original ways. Like her mother, she had a passion for science, math, and machines. It was a very good combination. Ada hoped that one day she could do something important with her creative and nimble mind. A hundred years before the dawn of the digital age, Ada Lovelace envisioned the computer-driven world we know today. And in demonstrating how the machine would be coded, she wrote the first computer program. She would go down in history as Ada Lovelace, the first computer programmer. Diane Stanley's lyrical writing and Jessie Hartland's vibrant illustrations capture the spirit of Ada Lovelace and bring her fascinating story vividly to life.

Lovelace provides an introduction to Ada 95, one of the most widely used programming languages in the world. Although the reader is assumed to have a basic understanding of programming, no prior exposure to Ada is assumed and all the basics of the language are covered. The book comprises eighteen chapters each of which is composed of short sections designed to cover a small number of key concept and to provide a test question to check the reader's understanding of the concepts covered. Each chapter then concludes with a small quiz to help ensure that the reader has grasped the principles covered in the chapter. One of Ada 95's new features, its object-oriented facilities, is covered in depth, and all of the essential features of Ada programming are covered thoroughly. In Ada 95 significant enhancements were also added to Ada's ability to interface with other programming languages (such as C, Fortran, and Cobol) and these are covered in one chapter. As a result both students and professional programmers learning Ada for the first time will welcome this new text.

"(Ada Lovelace), like Steve Jobs, stands at the intersection of arts and technology."—Walter Isaacson, author of *The Innovators* Over 150 years after her death, a widely-used scientific computer program was named "Ada," after Ada Lovelace, the only legitimate daughter of the eighteenth century's version of a rock star, Lord Byron. Why? Because, after computer pioneers such as Alan Turing began to rediscover her, it slowly became apparent that she had been a key but overlooked figure in the invention of the computer. In Ada Lovelace, James Essinger makes the case that the computer age could have started two centuries ago if Lovelace's contemporaries had recognized her research and fully grasped its implications. It's a remarkable tale, starting with the outrageous behavior of her father, which made Ada instantly famous upon birth. Ada would go on to overcome numerous obstacles to obtain a level of education typically forbidden to women of her day. She would eventually join forces with Charles Babbage, generally credited with inventing the computer, although as Essinger makes clear, Babbage couldn't have done it without Lovelace. Indeed, Lovelace wrote what is today considered the world's first computer program—despite opposition that the principles of science were "beyond the strength of a woman's physical power of application." Based on ten years of research and filled with fascinating characters and observations of the period, not to mention numerous illustrations, Essinger tells Ada's fascinating story in unprecedented detail to absorbing and inspiring effect.

Ada and the Engine

The Computer's Most Passionate Partnership

Charles Babbage and the Quest to Build the First Computer

In Byron's Wake: The Turbulent Lives of Lord Byron's Wife and Daughter: Annabella Milbanke and Ada Lovelace

The Thrilling Adventures of Lovelace and Babbage

The Private Life of Lord Byron

Romance, Reason and Byron's Daughter

This new biography tells for the first time the story of the woman who, alongside Charles Babbage, invented the world's first computer. The daughter of Lord Byron, Ada was the visionary who recognised the true potential of Babbage's of cog-wheel computer, The Analytical Engine. She demonstrated to the world that computers wouldn't merely be adding machines, but that they would be able to think. Ada and Babbage may have been colleagues, but they were also the closest of friends. Though she was 20 years his junior, they develop lasting relationship that blossomed into romance. Babbage was a genius and Ada was a woman with a singular vision, unconstrained by her by her time. Here we learn of their friendship and extraordinary legacy.

Scientists, Mathematicians, and Inventors provides biographies of 200 men and women who changed the world by leaving lasting legacies in the fields of science, mathematics, and scientific invention. It fills a gap in the biographical reference shelf by offering far more than basic facts about a scientist's life and work: each entry describes not only the immediate effects of the individual's discoveries, but also his or her impact on later scientific findings.

A masterful portrait of two remarkable women, revealing how two turbulent lives were always haunted by the dangerously enchanting, quicksilver spirit of that extraordinary father whom Ada never knew: Lord Byron. In 1815, the clever, courted, and cherished Annabella Milbanke married the notorious and brilliant Lord Byron. Just one year later, she fled, taking with her their baby daughter, the future Ada Lovelace. Byron himself escaped into exile and died as a revolutionary hero in 1824, aged 36. The one thing he had asked his wife to do was to make sure that their daughter never became a poet. Ada didn't. Brought up by a mother who became one of the most progressive reformers of Victorian England, Byron's little girl was introduced to mathematics as a means of calming her wild spirits. Educated by some of the most learned minds in England, she combined that scholarly discipline with a rebellious heart and a visionary imagination. As a child invalid, Ada dreamed of building a steam-driven flying horse. As an exuberant and boldly unconventional young woman, she amplified her explanations of Charles Babbage's unbuilt calculating engine to predict—as nobody would do for another century—the dawn of the modern computer age. When Ada died—like her father, she was only 36—great things seemed still to lie ahead for her as a passionate astronomer. Even while mired in debt from gambling and crippled by cancer, she was frenetically employing Faraday's experiments with light refraction to explore the analysis of distant stars. Drawing on fascinating new material, Seymour reveals the ways in which Byron, long after his death, continued to shape the lives and reputations both of his wife and his daughter. During her life, Lady Byron was praised as a paragon of virtue; within ten years of her death, she was vilified as a disgrace to her sex. Well over a hundred years later, Annabella Milbanke is still perceived as a prudish wife and cruelly controlling mother. But her hidden devotion to Byron and her tender ambitions for his mercurial, brilliant daughter reveal a deeply complex but unexpectedly sympathetic personality. Miranda Seymour has written a masterful portrait of two remarkable women, revealing how two turbulent lives were often governed and always haunted by the dangerously enchanting, quicksilver spirit of that extraordinary father whom Ada never knew.

Uses excerpts from letters, memoirs, and documents to recreate the life of Ada Byron, daughter of the English poet, and discusses her contributions to mathematics and her friendships with the leading mathematicians of the period

Ada's Ideas

Advanced Social Media Marketing

Scientists, Mathematicians and Inventors

The Cogwheel Brain

The World's First Computer Programmer

Cafe Neandertal

Mechanism of the Heavens

The partnership of Charles Babbage and Ada Lovelace was one that would change science forever. They were an unlikely pair - one the professor son of a banker, the other the only child of an acclaimed poet and a social-reforming mathematician - but perhaps that is why their work was so revolutionary. They were the pioneers of computer science, creating plans for what could have been the first computer. They each saw things the other did not: it may have been Charles who designed the machines, but it was Ada who could see their potential. But what were they like? And how did they work together? Using previously unpublished correspondence between them, Charles and Ada explores the relationship between two remarkable people who shared dreams far ahead of their time.

"Charished Reader, Should you come upon Enchantress of Numbers by Jennifer Chiaverini...consider yourself quite fortunate indeed....Chiaverini makes a convincing case that Ada Byron King is a woman worth celebrating."—USA Today The New York Times bestselling author of Mrs. Lincoln's Dressmaker and Switchboard Soldiers illuminates the life of Ada Byron King, Countess of Lovelace—Lord Byron's daughter and the world's first computer programmer. The only legitimate child of Lord Byron, the most brilliant, revered, and scandalous of the Romantic poets, Ada was destined for fame long before her birth. But her mathematician mother, estranged from Ada's infamous and destructively passionate father, is determined to save her only child from her perilous Byron heritage. Banishing fairy tales and make-believe from the nursery, Ada's mother provides her daughter with a rigorous education grounded in mathematics and science. Any troubling spark of imagination—or worse yet, passion or poetry—is promptly extinguished. Or so her mother believes. When Ada is introduced into London society as a highly eligible young heiress, she at last discovers the intellectual and social circles she has craved all her life. Little does she realize how her exciting new friendship with Charles Babbage—the brilliant, charming, and occasionally curmudgeonly inventor of an extraordinary machine, the Difference Engine—will define her destiny. Enchantress of Numbers unveils the passions, dreams, and insatiable thirst for knowledge of a largely unheralded pioneer in computing—a young woman who stepped out of her father's shadow to achieve her own laurels and champion the new technology that would shape the future.

Offers an illustrated telling of the story of Ada Byron Lovelace, from her early creative fascination with mathematics and science and her devastating bout with measles, to the ground-breaking algorithm she wrote for Charles Babbage's analytical engine. A fun and feminist look at forgotten women in science, technology, and beyond, from the bestselling author of THE FANGIRL'S GUIDE TO THE GALAXY You may think you know women's history pretty well. But have you ever heard of... Alice Ball, the chemist who developed an effective treatment for leprosy—only to have the credit taken by a man? Mary Sherman Morgan, the rocket scientist whose liquid fuel compounds blasted the first U.S. satellite into orbit? Huang Daoqo, the inventor whose weaving technology revolutionized textile production in China—centuries before the cotton gin? Smart women have always been able to achieve amazing things, even when the odds were stacked against them. In Wonder Women, author Sam Maggs tells the stories of the brilliant, brainy, and totally rad women in history who broke barriers as scientists, engineers, mathematicians, adventurers, and inventors. Plus, interviews with real-life women in STEM careers, an extensive bibliography, and a guide to women-centric science and technology organizations—all to show the many ways the geeky girls of today can help to build the future. Table of Contents: Women of Science Women of Medicine Women of Espionage Women of Innovation Women of Adventure

How a Hand-loom Led to the Birth of the Information Age

Poetical Science

Charles Byron Lovelace and the Thinking Machine

The (Mostly) True Story of the First Computer

The Story of Ada Lovelace

How Ada Lovelace Lord Byron's Daughter, Started the Computer Age

New Kind of Science

Ada Lovelace, the daughter of Lord Byron was born in 1815 just after the Battle of Waterloo, and died aged 36, soon after the Great Exhibition of 1851. She was connected with some of the most influential and colourful characters of the age: Charles Dickens, Michael Faraday, Charles Darwin and Charles Babbage. It was her work with Babbage that led to her being credited with the invention of computer programming and to her name being adopted for the programming language that controls the US military machine. Ada personified the seismic historical changes taking place over her lifetime. This was the era when fissures began to open up in culture: romance split away from reason, instinct from intellect, art from science. Ada came to embody these new polarities and her life heralded a new era: the machine age. Reissued to coincide with the bicentenary of Ada's birth, *The Bride of Science* is a fascinating examination of an extraordinary life offering devastating insight into the seemingly unbridgeable gulf between art and science, the consequences of which are still with us today.

In 1821, 30-year-old inventor and mathematician Charles Babbage was poring over a set of printed mathematical tables with his friend, the astronomer John Herschel. Finding error after error in the manually evaluated results, Babbage made an exclamation, the consequences of which would not only dominate the remaining 50 years of his life, but also lay the foundations for the modern computer industry: "I wish to God these calculations had been executed by steam!" A few days later, he set down a plan to build a machine that would carry out complex mathematical calculations without human intervention and, at least in theory, without human errors. The only technology to which he had access for solving the problem was the cogwheel escapement found inside clocks. Babbage saw that a machine constructed out of hundreds of escapements, cunningly and precisely linked, might be able to handle calculations mechanically. The story of his lifelong bid to construct such a machine is a triumph of human ingenuity, will and imagination.

This illuminating biography reveals how the daughter of Lord Byron, Britain's most infamous Romantic poet, became the world's first computer programmer. Even by 1800s standards, Ada Byron Lovelace had an unusual upbringing. Her strict mother worked hard at cultivating her own role as the long-suffering ex-wife of bad-boy poet Lord Byron while raising Ada in isolation. Tutored by the brightest minds, Ada developed a hunger for mental puzzles, mathematical conundrums, and scientific discovery that kept pace with the breathtaking advances of the industrial and social revolutions taking place in Europe. At seventeen, Ada met eccentric inventor Charles Babbage, a kindred spirit. Their ensuing collaborations resulted in ideas and concepts that presaged computer programming by almost two hundred years, and Ada Lovelace is now recognized as a pioneer and prophet of the information age. Award-winning author Emily Arnold McCully opens the window on a peculiar and singular intellect, shaped – and hampered – by history, social norms, and family dysfunction. The result is a portrait that is at once remarkable and fascinating, tragic and triumphant.

Hundreds of millions of Americans are using social media (SM), and already some 70% of businesses have joined them there, using Facebook and other SM platforms to connect with their customers, and attract new ones. So the real question isn't whether to take your business onto social media platforms—but how to do it quickly, effectively, on a budget, with smart goals, and a road map for success. *Advanced Social Media Marketing: How to Lead, Launch, and Manage a Successful Social Media Program* cuts through the hype and fluff about how social media is changing the world, and it gets down to what really matters: How you as a manager can best use SM to benefit your business. Written by a veteran online marketer and ecommerce professional, the book shares practical strategies and tactics to let you launch and scale a successful corporate social media program. *Advanced Social Media Marketing: How to Lead, Launch, and Manage a Successful Social Media Program* is for the manager who already knows something about social media and wants to roll up his or her sleeves and get down to business. In it, we simplify tasks that might otherwise be complicated—like adopting and tracking key performance metrics, developing online ad campaigns, or creating Facebook apps like games, giveaways and sweepstakes with the capacity to go viral. Businesses can harness the unique advantages of this new medium, but they need a practical, no-nonsense guide like this one. Otherwise they risk being ignored, wasting time and money or, even worse, damaging their own brand and seeing a well-intentioned online program blow up. The book is heavy on the how-to, case studies, campaign results and other statistics, and interviews with ecommerce managers at businesses large and small. It also includes the author's own experiences at Green Mountain Coffee Roasters, Wine of the Month Club, and others. While this book will be accessible enough for someone implementing a social media program for the first time, it's ambitious enough to benefit experienced SM hands who are looking for good ideas and techniques to push their online community to the next level of size, interactivity, and buzz.

Jacquard's Web

Who Says Women Can't Be Computer Programmers?

The First African Americans in the Space Program

Ada Lovelace, Poet of Science

The Making of a Computer Scientist

Ada's Algorithm – the Ada Lovelace musical

Ada, Countess of Lovelace (1815-1852), daughter of romantic poet Lord Byron and his highly educated wife, Anne Isabella, is sometimes called the world's first computer programmer and has become an icon for women in technology. But how did a young woman in the nineteenth century, without access to formal school or university education, acquire the knowledge of science?Although an unusual pursuit for women at the time, Ada Lovelace studied science and mathematics from a young age. This book uses previously unpublished archival material to explore her precocious childhood, from her ideas for a steam-powered flying horse to penetrating questions about the science of rainbows. A remarkable correspondence course with her developing into a gifted, perceptive and knowledgeable mathematician. Active in Victorian London's social and scientific elite alongside Mary Somerville, Michael Faraday and Charles Dickens, Ada Lovelace became fascinated by the computing machines devised by Charles Babbage. The table of mathematical formulae sometimes called the "first programme" occurs in her credit note as the long-suffering ex-wife of bad-boy poet Lord Byron while raising Ada in isolation. Tutored by the brightest minds, Ada developed a hunger for mental puzzles, mathematical conundrums, and scientific discovery that kept pace with the breathtaking advances of the industrial and social revolutions taking place in Europe. At seventeen, Ada met eccentric inventor Charles Babbage, a kindred spirit. Their ensuing collaborations resulted in ideas and concepts that presaged computer programming by almost two hundred years, and Ada Lovelace is now recognized as a pioneer and prophet of the information age. Award-winning author Emily Arnold McCully opens the window on a peculiar and singular intellect, shaped – and hampered – by history, social norms, and family dysfunction. The result is a portrait that is at once remarkable and fascinating, tragic and triumphant.

As the British Industrial Revolution dawned, young Ada Byron Lovelace (daughter of the flamboyant and notorious Lord Byron) sees the boundless creative potential in the "analytic engines" of her friend and soul mate Charles Babbage, inventor of the first mechanical computer. Ada envisions a whole new world where art and information converge—a world she might call the edgiest dreams of the future. Jane Austen meets Steve Jobs in this poignant pre-tech romance heralding the computer age.

The founder of Girls Who Code, a nonprofit that prepares underserved girls for careers in science and technology, charts the paths of accomplished women and encourages all women to take risks, embrace failure, compete and build support through a 21st-century sisterhood. 30,000 first printing.

The Space Age began just as the struggle for civil rights forced Americans to confront the long and bitter legacy of slavery, discrimination, and violence against African Americans. Presidents John F. Kennedy and Lyndon Johnson utilized the space program as an agent for social change, using federal equal employment opportunity laws to open workplaces at NASA and thousands of research and technology jobs in the Deep South to ameliorate poverty. We Could Not Fall tells the inspiring, largely unknown story of how shooting for the stars helped to overcome segregation on earth. Richard Paul and Steven Moss profile ten pioneer African American space workers whose stories illustrate the role NASA and the space program played for technicians, mathematicians, engineers, and an astronaut candidate surmounted barriers to move, in some cases literally, from the cotton fields to the launching pad. The authors vividly describe what it was like to be the sole African American in a NASA work group and how these brave and determined men also helped to transform Southern society by integrating, reviving and governing defunct towns. Adding new names to the roster of civil rights heroes and a new chapter to the story of space exploration, *We Could Not Fall* demonstrates how African Americans broke the color barrier by competing successfully at the highest level of American intellectual and technological achievement.

The First Computer Programmer

Ada 95

A Life and a Legacy

The Story of Ada Lovelace, the World's First Computer Programmer

My First Ada Lovelace

The Lovelace Tutorial

I, ADA

Charles Babbage and Ada Byron met in 1833. He was a widowed forty-two-year-old scientist and inventor, who was trying to figure out how to get his Difference Engine built. She was the eighteen-year-old daughter of the poet Lord Byron and Lady Annabella Byron, whose marriage had disintegrated in Ada's youth. Through thoughtful narrative accompanied by direct quotes, readers will learn how in Babbage's plans for the Analytical Engine and Lovelace's algorithm lies the foundation of the computer hardware and software that would not be developed for another hundred plus years. Sidebars, a chronology, and a further reading list provide more information on this inspirational collaboration.

Ada Byron, Lady Lovelace, and the First Program: and predict the impact of Charles Babbage's Analytical Engine in 1843. Beautiful and charming, she was often characterized as "mad and bad" as was her illustrious father. This e-book edition, *Ada, the Enchantress of Numbers: Poetical Science*, emphasizes Ada's unique talent of integrating imagination, poetry and science. This edition includes all of *Ada's* fascinating letters to Charles Babbage, 55 pictures, and sidebars that encourages the reader to follow Ada's pathway to the 21st century.

Based on detailed historical research, this lively, witty, dramatic and highly entertaining libretto, with accompanying lyrics, tells the story of Lord Byron's daughter Ada Byron - subsequently Ada, Countess of Lovelace. Ada was born into privilege and wealth, but her only dream was to become an inventor and a woman of science and to have a life of the mind. Blessed with talent, energy and a remarkable scientific imagination, Ada does all she can to try to make her dreams come true.

In 1971, Cynthia Solomon and Seymour Papert published *Twenty Things to Do with a Computer*, a revolutionary document that would set the course of education for the next fifty years and beyond. This book, *Twenty Things to Do with a Computer Forward 50*, is a celebration of the vision set forth by Papert and Solomon a half-century ago. Four dozen experts from around the world invite us to consider the implications, reflect on their implementation, and chart a course for the future through personal recollections, learning stories, and imaginative scenarios. *Twenty Things to Do with a Computer Forward 50* can inspire parents, educators, and aspiring teachers to make the world a better place for learning. The impact of *Twenty Things* is all around us. In 1971, Solomon and Papert predicted 1:1 personal computing, the mobile movement, the rise of computational thinking, children programming computers, robotic construction kits, computer science for all, and integrating computing across the curriculum. All of this, years, or even decades, before such notions became more commonplace. In fewer than thirty pages, *Twenty Things to Do with a Computer* introduced readers to an exciting world in which children use computers they own to create, solve problems, control their world, and bring powerful ideas to life across subject areas. More importantly, *Twenty Things* situates the ideals of progressive education in a modern context. Papert and Solomon demonstrated how computing could be creative, humane, whimsical, childlike, and a way to learn "everything else," even ideas at the frontiers of mathematics and science. Contributors to this book include scholars and tech pioneers who worked with Papert and Solomon in the 1970s, phenomenal classroom teachers, inventors, researchers, school administrators, university professors, and educational technology leaders. Essays in this collection offer multiple pathways for school reform. Authors include Cynthia Solomon, Sugata Mitra, Conrad Wolfram, Audrey Watters, David Thornburg, Yasmin Kafai, Dale Dougherty, Nettrice Gaskins, Dan Lynn Watt, Molly Lynn Watt, Gary Stager, Artemis Papert, Stephen Heppell, along with forty other brilliant thinkers and legendary educators. *Twenty Things to Do with a Computer Forward 50* is an effort to preserve a historical document and share it with future generations seeking a more creative, personal, empowering, and meaningful educational experience for young people. This book is a must-read for: Educators School leaders Preservice teachers Policymakers Technology developers Parents

Ada, the Enchantress of Numbers

Ada

Wonder Women

A Novel of Ada Lovelace

Charles Babbage and Ada Lovelace

Ada's Algorithm

We Could Not Fall

While much has been written about the 'father of computers' Charles Babbage and Alan Turing, the pioneer of computer science, many trailblazing female computer programmers have slipped beneath the radar. One of these is Ada Lovelace. A Countess and daughter of the infamous Lord Byron, Lovelace could have lived a very comfortable if unremarkable life, but instead she became a renowned mathematician and writer. She is chiefly known for her work with Charles Babbage, the aforementioned 'father of computers'. But it was actually Ada and not Babbage who was the first person to recognize that the machine had applications beyond pure calculation. She created the first algorithm intended to be carried out by such a machine and, as a result, she is regarded as the world's very first computer programmer. Her life is fascinating, taking in social and educational exploits with the leading scientists and writers of her day, including Charles Dickens. This new biography seeks to acquaint the reader with all the various milestones of an inspiring life and career. Ada Lovelace is increasingly becoming recognized as a true icon for women in technology. With girls and young women being encouraged ever more into the fields of mathematics, technology and science (fields previously dominated by men), women such as Ada are incredibly powerful figureheads with influential legacies. Her story is an inspiration to anyone seeking to break new ground in their chosen field.

The early life of Ada Lovelace, the 19th-century mathematician who is considered by many to be the world's first computer programmer. Ada Byron is rich and clever, but she longs to be free. Free to explore all the amazing ideas that come to her imagination, like flying mechanical horses and stories inspired by her travels. Free to find love and passion beyond the watchful gaze of her mother and governesses. And free to learn the full truth about her father, the notorious Lord Byron. Then Ada meets a man whose invention might just change the world - and he needs her visionary brilliance to bring it to life. . . . A wonderfully witty and poignant portrayal of the young life of Ada Lovelace, the 19th-century mathematician who is hailed as the world's first computer programmer.

Traces the 200-year evolution of the principles of Jacquard's knitting machines to the information revolution of the twentieth century and the desk-top computer of today. --From cover (p. 4).

The great Romantic poet Lord Byron starved himself compulsively for most of his life. His behaviour mystified his friends and other witnesses, yet he never imagined he was ill. Instead, he rationalised his behaviour as a fight for spiritual freedom and made it the cornerstone of his heroic ideal, which was central to his work and to his life and his death. This fresh biographical study aims to explore neglected or misunderstood aspects of his private life to illuminate his writing, his affairs with women, his passion for Napoleon and his conflicted friendships with Coleridge and Shelley. This in turn leads to a new understanding of his masterpiece, *Don Juan*. 15 July 2019 marks the 200th anniversary of its first publication. Antony Peattie situates these patterns of behaviour in a vividly rendered contemporary world, culminating in Byron's last days in Greece, where he tried to starve himself into heroic leadership but damaged his constitution, resulting in his death at the age of thirty-six.

How Lord Byron's Daughter Ada Lovelace Launched the Digital Age Through the Poetry of Numbers

Dreaming in Code: Ada Byron Lovelace, Computer Pioneer

Taken Principally from the Arithmetic of S.F. Lacroix, and Translated from the French with Such Alterations and Additions as Were Found Necessary in Order to Adapt it to the Use of American Students

25 Innovators, Inventors, and Trailblazers Who Changed History

Excavating Our Past in One of Europe's Most Ancient Places

How to Lead, Launch, and Manage a Successful Social Media Program

A Symposium on Digital Computing Machines

"Award-winning writer Bahrami is a delightful guide in this thoroughly enjoyable look into the research and recovery of a group of Neandertal remains in the French Dordogne region . . . Her wide interests in travel, memoir, food, wine, and more make this exceedingly engaging title more like a French version of Under the Tuscan Sun." —Booklist (starred review) Carved in the Dordogne region of southwestern France, one of Europe's most concentrated regions for Neandertal occupations, Cafe Neandertal features the work of archaeologists doing some of the most comprehensive and global work to date on the research, exploration, and recovery of our ancient ancestors, shedding a surprising light on what it means to be human.

Ada Lovelace (1815-1852) was the daughter of Lord Byron, a poet, and Anna Isabella Milbanke, a mathematician. Her parents separated when she was young, and her mother insisted on a logic-focused education, rejecting Byron's "mad" love of poetry. But Ada remained fascinated with her father and considered mathematics "poetical science." Via her friendship with inventor Charles Babbage, she became involved in "programming" his Analytical Engine, a precursor to the computer, thus becoming the world's first computer programmer. This picture book biography of Ada Lovelace is a compelling portrait of a woman who saw the potential for numbers to make art.

A startling reevaluation of Lady Byron's marriage and the untold story of her complex life as single mother and progressive force. The center of public attention after her tumultuous marriage to Lord Byron, Annabella Milbanke transformed herself from a neglected wife into a figure of incredible resilience and social vision. After she and her infant child were cast out of their home, she was left to navigate the stifling and unsupportive social environment of Regency England. Far from a victim or an obstacle to Byron's work, however, Lady Byron was a rebel against the fashionable snobbery of her class, founding the first Infants School and Co-Operative School in England. A poet and talented mathematician, Lady Byron supported the education of her precocious daughter, Ada Lovelace, now recognized and lauded as a pioneer of computer science, and saved from death her "adoptive daughter" Medora Leigh, the child of Lord Byron's incest with his sister. Lady Byron was adored by the younger abolitionist Harriet Beecher Stowe and by many notable friends. Yet her complex relationships with her family, including the sister Byron loved, runs like a live wire through this skillfully told and groundbreaking biography of a remarkable woman who made a life for herself and became a leading light in her century.

Tooled did research for more than eight years, burying herself in British archives and libraries to narrate and edit this extraordinary collection of letters written by Ada Lovelace. Not only do they outline Ada's ingenuity for the sciences, but they also enlighten us on all aspects of Lady Lovelace's multidimensional life: her passionate desire to flourish in a "man's world," her battle with drug addiction and chronic sickness, and her efforts as a mother and wife. Lovelace also had a reputation as a wild gambler and a lover. Ada was one of the first to write programs of instructions for Babbage's Analytical Engine, the famous precursors to the modern digital computer. Ada's letters are some of the classic founding documents of cybernetics and computer science, written nearly a century before ENIAC.

Twenty Things to Do with a Computer Forward 50

Future Visions of Education Inspired by Seymour Papert and Cynthia Solomon's Seminal Work

Notes from the Book

How Lord Byron's Daughter Ada Lovelace Launched the Digital Age

The Pen Pal's Who Imagined the First Computer

An Elementary Treatise on Arithmetic

Enchantress of Numbers

*"Ada Lovelace), like Steve Jobs, stands at the intersection of arts and technology."—Walter Isaacson, author of *The Innovators* Over 150 years after her death, a widely-used scientific computer program was named "Ada," after Ada Lovelace, the only legitimate daughter of the eighteenth century's version of a rock star, Lord Byron. Why? Because, after computer pioneers such as Alan Turing began to rediscover her, it slowly became apparent that she had been a key but overlooked figure in the invention of the computer. In Ada Lovelace, James Essinger makes the case that the computer age could have started two centuries ago if Lovelace's contemporaries had recognized her research and fully grasped its implications. It's a remarkable tale, starting with the outrageous behavior of her father, which made Ada instantly famous upon birth. Ada would go on to overcome numerous obstacles to obtain a level of education typically forbidden to women of her day. She would eventually join forces with Charles Babbage, generally credited with inventing the computer, although as Essinger makes clear, Babbage couldn't have done it without Lovelace. Indeed, Lovelace wrote what is today considered the world's first computer program—despite opposition that the principles of science were "beyond the strength of a woman's physical power of application." Based on ten years of research and filled with fascinating characters and observations of the period, not to mention numerous illustrations, Essinger tells Ada's fascinating story in unprecedented detail to absorbing and inspiring effect.*

A picture book biography of Ada Lovelace, the woman recognized today as history's first computer programmer—she imagined them 100 years before they existed! In the early nineteenth century lived Ada Byron: a young girl with a wild and wonderful imagination. The daughter of internationally acclaimed poet Lord Byron, Ada was tutored in science and mathematics from a very early age. But Ada's imagination was never meant to be tamed and, armed with the fundamentals of math and engineering, she came into her own as a woman of ideas—equal parts mathematician and philosopher. From her whimsical beginnings as a gifted child to her most sophisticated notes on Charles Babbage's Analytical Engine, this book celebrates the woman recognized today as the first computer programmer. This title has Common Core connections. Christy Ottaviano Books

Ada Lovelace: Bride of Science

A Selection from the Letters of Lord Byron's Daughter and Her Description of the First Computer

Lady Byron and Her Daughters

Ada Lovelace

A Female Genius

Charles and Ada

Women Who Don't Wait in Line