



Chris Arnesen

Minneapolis, Minnesota

Experience

SOFTWARE ENGINEERING STUDENT • PRIME DIGITAL ACADEMY • OCTOBER 2015 - FEBRUARY 2016

18-week accelerated learning program teaching foundational software engineering skills through a full stack web development curriculum with a focus on collaborative coding, public speaking, and solving real-world problems.

OPEN-SOURCE SOFTWARE ENGINEER • JANUARY - SEPTEMBER 2015

Wrote open-source JavaScript programs for the Bitcoin Core daemon, bitcoind. Attended Blockchain University, a 10-week program on Bitcoin and other cryptographic currencies. Contributed to Bitseed Personal Bitcoin Server community software program.

DEVOPS ENGINEER, STORYCLOUD • MOUNTAIN VIEW, CA • MARCH - DECEMBER 2014

Configured cloud computing resources for a web startup with a focus on security and scalability. Standardized laptop development environments using virtualization and configuration management. Implemented continuous build-test-release pipelines and live monitoring for our source code.

FIELD CONSULTANT, AB INITIO SOFTWARE • JUNE 2011 - DECEMBER 2013

Translated big-data applications to the Ab Initio programming language. Developed data differencing algorithms to test program output. Architected the merger of critical mainframe applications at a major airline.

INTERNAL CONSULTANT, AB INITIO SOFTWARE • LEXINGTON, MA • APRIL 2009 - MAY 2011

Responded to customer support requests about application design, best practices, performance tuning, software failures in development and in production. Developed and delivered instructor-led training courses. Unified the company's disparate training and demo programs into a single lightweight installer.

POSTDOCTORAL RESEARCHER, CARNEGIE MELLON UNIVERSITY • SEPTEMBER 2007 - JANUARY 2009

Calculated limits on the rate of Higgs boson production at the Large Hadron Collider.

Education

Ph.D. Physics, Massachusetts Institute of Technology, Cambridge MA, 2002-2007

B.S. Physics, California Institute of Technology, Pasadena CA, 1997-2001

Skills

Application architecture, distributed data processing, physics, scientific method, math, DevOps, technical writing, teaching, curriculum development, consulting, customer interaction, leadership, computer security, cloud computing, configuration management, databases, message queues, code conversion, release management, automation, testing, modeling, version control

Technologies: Node.js, Angular, React, Redux, PostgreSQL, MySQL, Teradata, Oracle, Hadoop, MongoDB, WebSphere MQ, Ab Initio, Kafka, HBase, ElastiCache, SQL Server, Bitcoin, WSDL, REST, remote procedure calls, Mediawiki, Git, GitHub, SVN, Maven, Gulp, npm, Perforce, Jade, Linux, AIX, z/Linux, mainframes, Windows, Mac OS X, Amazon Web Services, Google Cloud Platform, Heroku, IP networking, Google APIs, linear algebra, geometry, quantum mechanics, quantum field theory, statistics, calculus, trigonometry, complex analysis, Fourier series, linear regression, classical mechanics, symmetry groups, genetic algorithms

Languages: JavaScript, HTML, CSS, Ab Initio, SQL, Ansible, Mathematica, Bash, Ksh, Python, PHP, Fortran, LaTeX, Cobol, Markdown, Java, Matlab