

SOFTWARE PROTOTYPER, Freelance (2016-present)

- Developed a JavaScript framework for quickly building visual, interactive mathematical models.
- Prototyping web applications for financial planning, data analysis, and quantitative simulation.

SENIOR RESEARCH SCIENTIST, Tableau Software (2012-2016)

- Prototyped user interfaces that make data analysis, statistics, and visualization easier to use and understand across web, desktop, and mobile platforms. My work led to 16 patent applications.
- Invented and led the design of Vizable, a mobile app that makes “deciphering data approachable, intuitive, even enjoyable.” (*-Fast Company*) The app was profiled by hundreds of news outlets and featured by Apple.
- Mentored designers and researchers and led workshops on data science and UX design.
- Met weekly with Tableau’s co-founders to brainstorm and prioritize product development.

SOFTWARE ENGINEER & UX DESIGNER, The Omni Group (2008-2011)

- Led design and engineering for OmniGraphSketcher for macOS and iOS (applications for illustrative charting).
- Researched and developed multi-touch interaction techniques in preparation for Apple’s iPad launch.
- Designed user interfaces and implemented features for other apps, including OmniGraffle and OmniFocus.

FOUNDER, Robin Stewart Software (acquired by The Omni Group) (2003-2008)

- Designed and developed Graph Sketcher – a full-featured graphical software application for Mac.
- Created novel interaction techniques that combine freehand vector illustration with data visualization.
- Managed marketing, sales, documentation, customer support, usability research, and strategy.

WEBSITE DESIGNER, Freelance (1998-2015)

- Created over 20 websites, including information architecture, visual design, client and database programming.

SOFTWARE ENGINEER & UX DESIGNER, Socrata, Inc. (acquired by Tyler) (Summer 2008)

RESEARCH INTERN, Endeca Technologies (acquired by Oracle) (Summer 2007)

SOFTWARE INTERN, Kinetic Books (acquired by Perfection Learning) (Summer 2003 & 2004)

skills

Leadership & Team Practices: Self-organizing teams (“teal”), nonviolent communication, agile development...

Programming Languages: JavaScript, Swift, Python, Objective-C, C, C++, Java, HTML, CSS, PHP, SQL...

Design Tools: OmniGraffle Pro, Axure RP, Keynote, Final Cut Pro, Pixelmator, Balsamiq, Adobe Creative Suite...

Art forms: drawing, paper cutting, photography, drum kit, singing, music videos, theatre lighting, aerial circus arts...

education

MASSACHUSETTS INSTITUTE OF TECHNOLOGY: Master of Science in Computer Science

WILLIAMS COLLEGE: Bachelor of Arts in Computer Science and Cognitive Science (magna cum laude, with honors)

honors and awards

- **Tableau Merit Bonus** – for exemplary contributions, 2014 and 2015
- **Best Paper Award, ACM Conference on Human Factors in Computing Systems (CHI 2009)** – top 1% of submissions
- **National Science Foundation Graduate Research Fellowship** – one of 53 computer science recipients
- **Apple Worldwide Developer Conference Student Scholarship** – recipient, four years in a row
- **Microsoft National High School Computer Science Scholarship** – one of 15 recipients in the U.S.
- **SAT: Quantitative: 800, Verbal: 800** – perfect score