San Francisco, CA \diamond (856) 577-9182 mikeswoods@gmail.com

EDUCATION

Master of Science in Engineering, Computer and Information Science

University of Pennsylvania

Jan. 2012 - May 2015

Coursework in machine learning, computer vision, physically-based rendering, and computational linguistics.

Bachelor of Science, Computer Science (cum laude)

Rutgers, the State University of New Jersey

Jan. 2003 - May 2007

Work Experience

Intrinsic Software Engineer

San Francisco, CA Apr. 2016 – Present

- Core engineer for the design and implementation of Intrinsic's flagship product, a secure, Node.js library based on user-authorable, declarative security policies derived from the architecture outlined in *Hails: Protecting Data Privacy in Untrusted Web Applications* [https://www.usenix.org/node/170829].
- Wrote tools to analyze the package dependency graph of a Javascript program, revealing useful metrics regarding the size and scope of its attack surface.
- Wrote a compiler and associated tooling to greatly speed up a previously labor-intensive task, mainly virtualizing the Node.js standard library as well as popular third-party libraries.

Yelp, Inc. Software Engineer

San Francisco, CA Aug. 2015 – Apr. 2016

- Implemented core consumer features and bug fixes on the Yelp Android and iOS mobile applications.
- Enhanced the way metrics were collected on both mobile and backend products to improve the data quality (location, hours of operation, etc.) of businesses listed on Yelp.
- Performed troubleshooting and contributed performance enhancements to Yelp's email sending infrastructure.
- Contributed enhancements and bug fixes for internal tools used by Yelp's team of community ambassadors.

Abramson Cancer Center, University of Pennsylvania Application Developer

Philadelphia, PA Nov. 2010 – May 2015

- Created the first iteration of the Abramson Cancer Center Applied Research Database (ACCARD), a unified clinical and research data aggregation platform that simplified the day-to-day data management and analysis tasks of cancer researchers.
- Wrote an interactive data exploration tool that allowed non-technical staff to create, save, and transform database queries and reports via a simple, responsive web interface.

AmeriFlex Software Developer

Mt. Laurel, NJ Apr. 2010 – Nov. 2010

- Created and maintained a number of in-house tools that automated many of the tedious and error-prone tasks conducted daily by business staff.
- Reverse engineered and subsequently rewrote an undocumented proprietary ACH payment processing system critical to the functioning and profitability of the business.

New Jersey State Parole Board Software Developer

Trenton, NJ June 2007 – Apr. 2010

• Developed a public-facing geographic parolee search tool with an integrated absconder tip submission feature. With the help of the public, a number of useful tips were received by the tool that led to the apprehension of fugitive parolees.

Projects & Portfolio

http://mikeswoods.github.io

https://www.linkedin.com/in/michael-woods-82696953