

Philadelphia, PA \diamond (856) 577-9182 mikeswoods@gmail.com

EDUCATION

Master of Science in Engineering, Computer and Information Science

University of Pennsylvania

Jan. 2012 - May 2015 (expected)

- GPA: 3.54/4.0
- 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

Abramson Cancer Center, University of Pennsylvania Application Developer

Philadelphia, PA Nov. 2010 – Present

- Created the first iteration of the Abramson Cancer Center Applied Research Database (ACCARD), a unified clinical and research data aggregation platform that simplifies 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 an innovative, public-facing geographic parolee search tool with an integrated absconder tip submission interface. With the help of the public, a number of useful tips were received by the tool that led to the apprehension of fugitive parolees.
- Created the official New Jersey State Parole Board website (http://www.state.nj.us/parole) utilizing standards compliant design. The Google Maps API was utilized to create an interactive map of SPB district offices throughout the state.

Projects & Portfolio of Work

See http://mikewoods.io and http://github.com/mikeswoods

Professional Interests

Python, C++, Julia, Haskell, OCaml, functional programming, type systems, machine learning, data visualization, natural language processing, computer vision, raytracing, OpenGL/shaders, procedural generation