Stephen Demos

CONTACT
INFORMATION

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EDUCATION

Rochester Institute of Technology - Rochester, NY   September 2012 - June 2017
  B.S. Computer Science   (Expected)

WORK EXPERIENCE

Kitware, Inc. - Clifton Park, NY   Summer 2015
Research and Development Intern   `kitware.com`
Worked as an intern in the Computer Vision division of Kitware. Wrote C++ and Python supporting a variety of projects, such as a python script to stabilize video footage using a combination of SURF and manually annotated feature points, writing a C++ process to import detections from a file, and C++ supporting a project whose goal is to analyze the stability of crowds of people, such as rioters, by using video pulled from social media.

Janssen Biotech, Inc. - Rochester, NY   Spring 2015
Systems Engineer   `xyntekinc.com`
Working part-time, remote, as a contractor for Janssen, a subsidiary of Johnson and Johnson. Designing and implementing a system for drug manufacturing process analysis and data aggregation in Haskell.

Intuit - San Diego, CA   Summer-Fall 2014
Software Development Intern   `intuit.com`
Worked on the TurboTax Online (TTO) Web Platform team, which is responsible for development of backend systems that TTO runs on. Worked on separating TTO's static assets from its backend and putting the static assets on Amazon S3 utilizing Amazon's CloudFront CDN and updating the internal representation of a user to handle an ever-increasing number of users, as well as other tasks written in Java, C++, Perl, Bash, and Javascript.

TECHNICAL SKILLS

Languages C/C++, Python, Haskell, Java, HTML/CSS, Javascript, Coq
Operating Systems Linux - RHEL/derivatives, Debian/derivatives, Gentoo , Mac, Windows
Tools zsh, vim, git/Perforce/Subversion, Github/Gitlab/Bitbucket, cscope, IntelliJ/Eclipse, Visual Studio, Make/CMake, clang/gcc, LLDB/GDB, Xcode, Splunk

PERSONAL PROJECTS

Nethack A terminal-based dungeon-crawler RPG with a large code base, versioned in git. I worked on new features with other people in Computer Science House, updated the code base, and fixed bugs. I am a contributor on a fork named BingeHack4. I ported achievements over from our old fork, and collaborated on an HTTP API written in Haskell for interacting with an achievements database.

CSH Evaluations System An API and web frontend for keeping track of members in various stages of the CSH Evaluations process. The goal of the project is to allow members to see their current status, as well as allow statistical analysis on historical data. Written in Haskell, by a team of collaborators, communicating primarily using Slack and Github issues.

Lindenmayer Systems Fractal-like drawings made using context-free grammars that define rules for string rewriting, known for their ability to effectively model natural plant growth. I made a library for easily creating and executing them, written in Python using Turtle graphics.

ACTIVITIES

Computer Science House (CSH)   9/2012 - Present
House Improvements Director   `csh.rit.edu`
CSH is a student-run organization tailored for those interested in expanding their knowledge of computer science outside of the classroom. This is achieved through a culture of doing projects, learning, and teaching others through members-only seminars and workshops, as well as providing members with many internal services.

Boy Scouts of America   2006-Present
Eagle Scout rank. High Ropes Instructor and Dining Hall Steward at Camp Wakpominee.