

Experience

Technical Intern	Nebula	June 2013 - August 2013
<ul style="list-style-type: none">Enhanced Python-based unit and functional test suite to allow for quicker testing and the production of succinct but informative test results and code coverageImplemented Collectd plugins to visualize physical and virtual machine usage through the Graphite realtime graphing system, allowing developers to easily identify when and where problems occur in the systemRedesigned disk image building system (taking it from Python to Make), removing redundant operations and enabling partial builds, drastically reducing the build time in a key part of the system		
Summer Technical Analyst (Mobile Group)	Bank of America	June 2012 - August 2012
<ul style="list-style-type: none">Designed and prototyped a secure file syncing application for iOS, utilizing an internal cloud storage platformBegan investigation into automated testing for the iOS team using Apple's built-in toolsConfigured OSQA (an open source Q&A platform), allowing the mobile teams to easily disseminate information, and modified the code base to integrate with BoA's authentication technology		

Education

Ewing, NJ	The College of New Jersey	August 2010 - Expected May 2014
<ul style="list-style-type: none">BS in Computer Science with a 3.67/4.00Courses include: Artificial Intelligence, Advanced Analysis of Algorithms, Microcontrollers, Cloud Computing, Computational Biology, Computer Graphics		

Projects

Ray Tracer — Ongoing — <https://github.com/goakley/ray-tracer>

- Uses real-world lighting and wave physics concepts to realistically render 3D scenes
- Use of 3D transformation with vector/matrix manipulation allows for complex camera views
- Basic scripting language provides a method for creating detailed scenes independent of the engine

Centivize — September 2013 — <https://github.com/goakley/centivize>

- Enables users to put a price on their tasks; failing to complete a task forfeits that money to charity
- Entire system flow designed and built in 48 hours during the PennApps hackathon
- Implemented using Node.js (Express framework), Redis, Dwolla payments API and Mozilla Persona for authentication

Hackskell - Ongoing — <https://github.com/goakley/Hackskell>

- A set of (Haskell) tools for targeting Hack, a Harvard architecture machine
- Uses a basic LL parser for building internal representations of the applicable languages

Cumulonimbus IDE — February 2013 - April 2013 — <https://github.com/goakley/cumulonimbus-ide>

- Yet another collaborative online text/code editor
- Powered by Amazon Web Services for data and document storage, queue-based messaging, and load balancing

Project Spin — June 2013 — <http://glenoakley.com/pspin>

- HTML5 game in which the player attempts to match actions to the beat of the music
- Original design and prototype completed in 48 hours during the Global Game Jam 2012
- Takes advantage of the Web Audio API for advanced audio processing and timings

Affiliations

Engineering Fellow	Kleiner Perkins Caufield Byers	2013
Student Chapter Board Member	Association for Computing Machinery	2011 - 2014
Board Member	TCNJ Magic Circle Game Design	2011 - 2014

Technologies

C, Python, C++, JavaScript, Haskell, Bash, OpenGL, Git, Redis, Node.js, Make, MongoDB, JSSML