Preeya Joshi

Email: preeya@based.af Website: http://preeya.me

Github: https://github.com/ilovepjs

CV: http://preeya.me/cv.pdf

Education

Imperial College London, Computing MEng

Sept 2012 - Present

Employment

Stripe - Security Team, Software Engineer

July 2015 - Oct 2015

- Audited the API auth and validation code, using Static Analysis techniques and some basic fuzzing.
- Patched flaws discovered during the audit, and wrote up a report documenting my findings.
- Wrote a framework used internally to allow arbitrary task execution in an audited, sandboxed environment.
- Spun up a server to run tasks, added nagios checks and an abstract test suite for the framework

Stripe - Risk Team, Software Engineer

April 2015 - July 2015

- Carried out analysis on EU Fraud data using Amazon Redshift, and added fraud defences to Stripe's pipelines in Ruby
- Helped build out general infrastructure for the Risk Analysts, as well joining the Risk Eng on-call rotation

Google, Software Engineer Intern

June 2014 - Oct 2014

- Worked on a team developing an advanced recommendation engine in Google TV Search.
- Used the Glass GDK, Android SDK, GWT and Java to create a Google Glass and web front end.
- I also created several backend components using Java, GWT RPC and internal file systems.
- Gained experience in comprehensive functional and unit testing.

Selex ES, Software Engineer Intern

July 2013 - Oct 2013

- Created an augmented reality user interface to allow dynamic configuration of devices.
- I reversed engineered ZBar, an open source C library, to recognise modified QR codes.
- I implemented a Java backend to let devices broadcast their capabilities and interact through a zookeeper server node. This used Apache CXF distributed OSGI and the Apache Felix Framework.
- Developed a responsive GTK GUI to augment a camera feed with device properties embedded in the QR codes

Imperial College London, Undergraduate Teaching Assistant

Sept 2014 - Present

- Personal Programming Tutor for 1st year undergraduate students teaching Haskell, Java and C.
- I am responsible for taking tutorials and mark programming coursework.

Projects

Explore Earth Visualisation, http://explorearth.preeya.me

Visualisation from http://reddit.com/r/earthporn mapped on WebGLEarth. Built using Python and Django

Wittl, http://wittl.it

A realtime collaborative comparison site to compare "objects" on user preferences (wittls). The service takes a list of objects, applies 'wittls' to them and ranks them accordingly. Developed using Django and AngularJS it currently supports Airbnb, Auto-trader and Zoopla.

Clan Test, http://clan.preeya.me

The CLAN test is a military test designed to assess multi tasking skills. I created a game based upon it to, to allow applicants to practice and for others to give it a try.

Achievements

- American Express Scholarship Grant Recipient, Grace Hopper Conference 2015
- Google Intern Grant Recipient, Grace Hopper Conference 2014
- Twilio API Prize, Major League Hacking Launch Hack 2014
- Queens Golden Jubilee Scholar, Grocer's Company 2012 2016
- Imperial Scholarship Athlete 2012 2106
- Taekwondo Sparring, Gold medal, BSTF Student Taekwondo Nationals 2014
- 1st place Facebook UK Universities Hackathon 2013
- 1st place UCL FindS Hackin' the City Hackathon 2013
- UK finalist, National Science and Engineering Competition 2011