

RICKY RAJANI

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EDUCATION

University of Pennsylvania expected May 2018

School of Engineering and Applied Sciences – Bachelor of Science in Engineering, Digital Media Design

Relevant Coursework: Data Structures and Algorithms, Computer Graphics Techniques, Artificial Intelligence, Computer Animation, Software Engineering, Discrete Mathematics, Applications of Scientific Computation, 3D Modeling

EXPERIENCE

Oculus VR (Facebook), Menlo Park, CA, PC SDK Graphics Software Engineer Intern June – August 2017

- Load static cubemaps and render and save out environment cubemaps using the Oculus SDK, DirectX and OpenGL
- Render a head-locked overlay on the PC platform to expose the IPD slider functionality using React
- Add screenshot functionality triggered by user input on the PC platform using DirectX and React

Tumblr, New York, NY, Core Web Intern June – August 2016

- Maintained coding standards and internal tools
- Implemented a documentation framework with custom styles using JSDoc3 and Dockers
- Set up Data Lasso, a 3D data visualization tool, to work on Oculus using WebVR

The University of Pennsylvania, Teaching Assistant January 2015 – Present

The Wharton School - Gamification for Business (LGST 240)

- Assist in class simulations that demonstrate effective game design techniques

School of Engineering and Applied Science – Introduction to Computer Programming (CIS 110)

- Serve in the computer labs, hold weekly office hours and assist students in completing the weekly homework

GenHERation, Female Empowerment Network, Philadelphia, PA, Intern October 2014 – Present

- Highlight human interest pieces that feature inspirational stories of women leaders in tech from across the country

Trove News (Washington Post Social Reader), Washington D.C., Front End Developer Intern May – August 2015

- Used Pyramid Web Framework and Backbone.js to build out user interface of single page news discovery web application
- Implemented the Karma testing framework using Jasmine and Sinon for Javascript unit testing
- Worked with the Product and Backend teams to create a prototype for a newsletter feature

First Bytes Computer Science Camp at the University of Texas at Austin, Assistant June – July 2014

- Guided company representatives in holding over 15 workshops exposing 75 campers to technology and programming
- Assisted in teaching C++ to campers

LEADERSHIP AND COMMUNITY OUTREACH

Daily Pennsylvanian Innovation Lab, Internal Consulting Board Member since 2016

- Receive a portion of the \$100,000 budget and institutional support to develop and execute innovation projects to bring the newspaper closer to its readers and generate new revenue streams

Class Board 2018, Engineering Class Chair & Webmaster since 2014

- Build and maintain the official Penn 18 website to keep the class updated on future events
- Successfully hosted 5000-person post-football game concerts, study breaks, and community service events

Women in Computer Science, Mentoring Committee Board Member since 2016

PROJECTS

Mini Minecraft 2016 – C++, OpenGL, GLSL

- Class project implementing many computer graphics principles: procedural graphics (perlin noise function and L-systems), raymarching, octree acceleration, animation, texture mapping

PennChats PennApps Hackathon 2016 – HTML, CSS, Javascript, Bootstrap

- Designed and implemented an exclusive, online chatting service for Penn students to interact with classmates during class

Embedded Media (Second Place Award) Trove News Company Hackathon 2015 – Coffeescript, Python

- Worked with the Backend team to integrate NPR podcasts and YouTube videos into the web interface

Map the Change (Second Place Award) Hack the Change Hackathon 2014 - HTML, CSS, Bootstrap

- Developed a web application to assist Peace Corps volunteers in keeping track of their contributions to OpenStreetMap

TECHNICAL SKILLS

- **Proficient:** Java, C++, OpenGL, HTML, CSS/Sass and Adobe Photoshop
- **Familiar:** OpenGL, DirectX, Unity, Python, React, Javascript, Bootstrap, MATLAB, and Autodesk Maya