

Patrick Lin

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EDUCATION

University of California, Berkeley: Bachelor of Arts in Computer Science, May 2015

GPA: 3.3

CS Coursework: Databases, Networks, AI, Machine Learning, Security, User Interfaces & HCI, Algorithms, Graphics

SKILLS

Languages: Python, Java, R, HTML/CSS, JavaScript, C

Other: Eclipse, Android SDK, Git, UNIX, SQL, Bootstrap, LaTeX

WORK EXPERIENCE

IBM: Web Development Intern, Wayne, PA

June - August 2014

- Developed and refined the talent management web application in IBM's Smarter Workforce enterprise product suite using Java portlets, HTML/LESS, JavaScript, and JSPs with the UI team in an Agile environment
- Implemented responsive web functionalities, customizable admin portlet messages, and dynamically filtered forms

Visa Inc: Global Information Security Intern, Foster City, CA

June - August 2013

- Improved the communications of the 300+ information security department by wireframing a more usable website and drafting a 30 page report detailing key issues, using data gathered from interviewing 27 global Visa employees
- Analyzed the company's Android browser's source code, highlighting areas of security interest through UML diagrams
- Audited company specifications for cryptographic key management against industry best practices (NIST, KMIP, IETF)

PROJECTS (GitHub: patricklin)

Wordtastic (Java/Android SDK)

Developed a voice-operated, customizable flashcard-based app to facilitate parent-child interaction and vocabulary building. Conducted task analysis and user testing, created prototypes, coded, and presented app.

Raytracer (C++)

Created a program to render realistic 3D object scenes with shadows, reflections, and refractions from scratch.

Presidential Predictions (R)

Aggregated past election results and trained classifiers using recursive partitioning and KNN to compare misclassification rates and map changes in voting trends.

SimpleDB (SQL, Java)

Implemented a custom database system including the base catalog structure, SQL support, query optimization via cost estimation, and concurrency control.

Database Design (Python, Google Maps API, Access, Visio)

Constructed a normalized relational database for a yoga studio, with EER diagram, schema, and queries. Mapped optimal expansion locations using k-means clustering.

Network Simulators (Python)

Implemented simulations of distance-vector protocol IP routing, reliable bi-directional UDP packet receivers, and stateful, active end-host firewalls.

LEADERSHIP

Innovative Design: Vice President of Photo Services

January 2014 – May 2015

Coordinated with clients and 20+ student photographers to organize portrait sessions and event photography, directly led eight through exercises in post-processing and shooting techniques, and taught for an introductory photo course

Berkeley Innovation: Mounza UI Redesign

January – May 2015

Overhauled the application's recruiter website interface in direct collaboration with the company's founders

Pioneers in Engineering: Robotics Team Mentor

January – May 2013

Guided a team of high school students through the process of designing, assembling, and programming (in C#) an autonomous and remote controllable contender against 23 other teams into the robotics competition's quarter finals