Colby Harrison

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EDUCATION

UNIVERSITY OF CALIFORNIA, SAN DIEGO
BS in Computer Science
Expected Grad: June 2016
Cum. GPA: 3.38 / 4.0

SANTA ROSA JUNIOR COLLEGE
Grad: June 2013
Cum. GPA: 3.63 / 4.0

COURSEWORK

UNDERGRADUATE
Advanced Data Structures   (100)
Design/Analysis of Algorithms   (101)
Software Engineering   (110)
Computer Operating Systems   (120)
Computer Networks   (123)

Current
Intro Computer Security   (127)
Compiler Construction   (131)
Database System Principles   (132)
Successful Entrepreneurship   (190)

SKILLS

PROGRAMMING
Java • C++ • C • Javascript
Familiar:
Ocaml • Verilog • HTML • CSS

TECHNOLOGY
Android • Node.js • MongoDB
Express • OpenCV

TOOLS
Git • Docker • Amazon EC2
Android Studio • Eclipse • Intellij
Visual Studio

INTERESTS

C.S. for Social Good
Backpacking

PERSONAL PROJECTS

DROPX June 2015 – Present
- Android app to entice users to explore their environment by creating a virtual treasure hunt.
- Created a REST server using Node.js, Express, and MongoDB to store and serve treasure location, treasure content, and user information.
- Leveraged MongoDB Location Indexes and Google Fused Location API to provide low power discovery of treasure, accurate within 20 meters.
- Treasure is in the form of messages, images, video.
- Used Docker and Amazon EC2 to host server.

Tech
Android • MEN Stack • Amazon EC2

PERSONAL WEBSITE June 2015   http://colbyharrison.github.io
- Created and designed a portfolio website following Google Material Design philosophies.

Tech
Material Design Lite • HTML/CSS

WORK EXPERIENCE

UCSD | Tutor
Spring 2015, Fall 2015
- Digital Systems Laboratory (140L): Current
- Software Engineering (110): Facilitated labs of 30 + C.S. students.
  - Taught necessary software engineering tools to set students up for success.
  - Basic Web Dev., Multiple IDEs, Virtual Machines.
- Software Tools & Techniques Lab (15L): Helped students learn basic computer science tools.
  - Unix Commands, Scripting, Version Control, Unit Testing.

CUBIC TRANSPORTATION | Software Engineering Intern
June 2014 - April 2015 | San Diego, CA
- Worked with 3 other people to create a card-less/cash-less payment system for bus and rail transportation. The project was demoed at 2+ Tech Expos.
- Used Android devices to locate BLE beacons to determine if the user was on public transportation.
- Tested feasibility of using OpenCV as a customer recognition system for Cubic's next Summer Internship Program.

Tech
Android • Node.js • MongoDB • IBeacon • OpenCV • Visual Studio

RESEARCH

HUMAN-CENTERED COMPUTING | Undergrad Research
August 2014 - September 2014
- Added a mouse tracking plugin to Morae Recording Software.
- Used Microsoft COM Objects to track and save mouse location from a screen recording.
- Communicated with Morae Recording Software developers to implement plugin.

Tech
C++ • Microsoft COM Objects • Visual Studio