Sirjan **Kafle**

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EDUCATION

UNIVERSITY OF CALIFORNIA BERKELEY
ELECTRICAL ENGINEERING AND COMPUTER SCIENCE
Expected May 2018 | Berkeley, CA
College of Engineering
Dean's Honors
Cum. GPA: 4.0 / 4.0
Major GPA: 4.0 / 4.0

LINKS

Github:// **SirjanK**
LinkedIn:// **sirjankafle**

COURSEWORK

COMPUTER SCIENCE
CS189 - Machine Learning
CS170 - Efficient Algorithms
CS186 - Database Systems
CS61B - Data Structures
CS70 - Discrete Math and Probability Theory
CS61A - Structure and Intrepretation of Computer Programs

ELECTRICAL ENGINEERING
EE16B - Designing Information Devices and Systems 2
EE16A - Designing Information Devices and Systems 1
MATHEMATICS
Math53 - Multivariable Calculus
Math54 - Linear Algebra and Differential Equations

PROGRAMMING

Languages
Java • Python • JavaScript • Ruby • SQLite
Tools/Platforms
Android • Raspberry Pi • Flask • HTML • CSS • Firebase • Bash Scripting
Other
Git • UNIX • LaTeX

EXPERIENCE

HERE | HIGHLY AUTONOMOUS DRIVING SOFTWARE INTERN
June 2016 – Current | Berkeley, CA
- Built an Android Surface Application to communicate with various pieces of hardware using the Robot Operating System Java library.
- Facilitated data collection for creating Maps to aid Autonomous Driving efforts.
- Worked under the Agile system with daily standups, frequently showcasing features personally implemented to stakeholders.

MOBILE DEVELOPERS OF BERKELEY | SENIOR ANDROID DEVELOPER
August 2015 - Current | Berkeley, CA
- Guided new teams in the Mobile Developers club of Berkeley club with Android development, from the design phase to release phase.
- Writing new Android Platform tools for club use and open source use.

EE16A COURSE STAFF | READER/TUTOR/LAB ASSISTANT
January 2016 - May 2016 | Berkeley, CA
- Aided Students for Labs and HW while also grading assignments.
- Labs such as Image Processing and Locationing with Sound Waves included programming assignments in Python, which required frequent usage of the NumPy Library.

PERSONAL PROJECTS

LOCSERV Raspberry Pi Application in Python
- Wrote a Local Flask Server hosted using Ngrok as a Webhook for the Twilio API to send and receive terminal commands via SMS messages.
- Ran the commands synchronously on the Raspberry Pi (although compatible with other Linux machines) and sent output back to user.
- Scripted Python and Bash commands in order to generate a seamless method for setting up the Server and configuring the webhook.

QLIC ANDROID APPLICATION Social Media Transmission App
- Designed and developed an Android Application dealing with sharing information with surrounding groups.
- Used the Google Nearby API for transferring string payloads and dealt with custom serialization and deserialization.

YACKRANK Visualize YikYak posts for Colleges around the Country
- Developed a web app using Flask and Python to analyze Yik Yak posts from colleges across the U.S.
- Displayed various information such as top post, most frequent word (after filtering out articles and common words), and results of a natural language library to detect average reading level on a Google Map view.

CONCENTRAID ANDROID APPLICATION Student Study Aid App
- Engineered an Android Application for breaking up study time based on the Pomodoro Effect.
- Used open source libraries dealing with various specialized Views and adopted a system of Callbacks for managing tasks.