AMAY SAXENA

Areas of concentration - Software Engineering, Robotics, Controls, Deep Learning for Autonomous Systems

P.S. This is a copy of my resume specifically optimised for resume parsers.

EXPERIENCE

Oracle Financial Software Services — Software Intern
SUMMER 2017
* FlexCube provides a comprehensive, integrated, interoperable, and modular solution that enables banks to manage evolving customer expectations. I worked on the migration of upgrades and added features to the newest version of the core FlexCube banking solutions software.

ULAB @ Berkeley — Research Mentor, Autonomous Systems
FALL 2017 - PRESENT
* Currently working as a research mentor to a team of undergraduate researchers studying AI safety through adversarial attacks on deep learning systems, at the Undergraduate Lab (ULAB), in conjunction with major EECS research labs on campus.

RobotStudio — Co-Founder
SPRING 2017 - PRESENT
* Edu-tech start-up building a novel educational robotics platform. Developing robot and companion app using Arduino, C, ROS, and Android. Winners of Berkeley Robotics For Good ’17. Product has been picked up by Program Your Future, and will be implemented in schools around the bay area by summer 2018.

CITRIS and The Banatao Institute — Research Fellow
SPRING 2017 - PRESENT
* Human-Computer Interaction fellowship at the UC Berkeley branch of CITRIS, CITRIS and The Banatao Institute. Prototyped gesture-based robot control interfaces using Arduino, C++, EMG sensors, and Python. Prototyped voice-based robotic control using Arduino and Android app.

UC Berkeley Department of EECS — Course Staff
SPRING 2017 - PRESENT
* Academic intern (course staff) for the courses CS61A, CS70, and EE16B, UC Berkeley’s flagship intro EECS sequence. Responsibilities include lab assistantship, teaching during office hours and HW/ Project review sessions.

PROJECTS

Apollo (CalHacks '17) - Gesture based robotic control interface [Python, C++]
Investigated accessible personal robot control interfaces. Used an EMG band in order to control a robot wirelessly through hand gestures
(goo.gl/4vRB4w)

Zeno v1 - An Interactive, Open Source, Educational Robotics Platform [C++]
Wrote the user-facing software library [C++] and designed the electrical systems and drive-base of robotic platform.
(goo.gl/ZZL8e3)

Adversarial Attacks on Computer Vision Systems [Python, Tensorflow, Keras]
Wrote a demo/test script as part of my work with ULAB that implements an adversarial attack on a DNN trained for CIFAR-10 image classification using a genetic algorithm based approach.
(https://goo.gl/UXMTqp)

GitLet - A local version control system [Java]
Implemented a local version control system, with a subset of the features of git (commit, merge, branch, general file-handling, push, pull, rm)

BearMaps - A Maps clone [Java]
Implemented routing functionality using A*, and parsed large amounts of XML mapping data using quad-tree search.

EDUCATION

University of California, Berkeley
FALL 2016 - SPRING 2020
* Electrical Engineering and Computer Science B.S.
* Pure Mathematics B.A.
* Physics Minor
* GPA - 3.6 / 4.0

SKILLS

* 5000+ loc - Java | Python | Latex | Shell
* Familiar - Lisp | C++ | TensorFlow | Keras
* Other - Deep Learning | Robotics | Control Theory | Signals & Systems Design | Micro-controllers

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AWARDS & HONORS

UC Berkeley Robotics For Good 2017

* Winner of the UC Berkeley Robotics For Good product design/MVP production competition. The product got picked up for production by bay area edu-tech company Program Your Future.

William Lowell Putnam Mathematical Competition 2016
* Rank: Top 1000.

COURSEWORK

Graduate:
* EE221A - Linear Systems & Control Theory

Undergraduate:
* CS188 - Artificial Intelligence
* EE120 - Signals & Systems

CONTACT

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