Eric Linxie

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Education

UC Berkeley Electrical Engineering and Computer Science (GPA 3.512) **2014 - present**

Work Experience

Undergraduate Researcher at Berkeley Energy and Climate Institute **August 2017 - present**

- Tested and modified inverter model code on Gridlab-d, an open-sourced c-based power grid modeling software

Android Software Engineering Intern at UI/UX department, Workday **June - August 2017**

- Developed feature called Racetrack, which allows managers to track a team member's progress on a Workday task
- Implemented/tested the models, data extraction, animated progress bars, and activities for Racetrack on Android

Lab assistant for EE16B, Designing Information Devices and Systems II **September 2016 - April 2017**

- Helped students debug and clean circuits and code they build for the labs in this electrical engineering class.

Backend developer at Mobility, Vehicles, and Electricity System Research Lab at LBNL **January - August 2016**

- Developed and re-architectured the backend of a mobile app called MyGreenCar, which records user trips and provides fuel/battery consumption metrics of that trip given a set of cars the user wants to simulate/compare.
- Used Docker to split up the backend from a single server to a multi-machine system. Separated functionality into the following containers: database, web-framework, broker, and worker.
- Sent larger jobs from web framework to numerous workers on the NERSC system (the supercomputer at LBNL) using Celery, Redis,
- Made in-team presentations and documentation on the new system architecture.

Projects

RoomFinder (Workday Intern/GW Hackathon) **July 2017**

- Implemented a bot for slack that found free rooms in Workday from Microsoft Office.
- Handled API calls to Microsoft Office to find list of available rooms given a certain time, building and floor.

Sim Content Team (Virtual Reality Club at Berkeley) **October - December 2015**

- Utilized Unity and the Oculus Rift to make a VR drunk driving simulator.
- Modified Unity standard asset scripts to create AI cars for the simulator.
- Utilized AutoDesk Maya to create custom 3D assets and imported them to Unity.

FudFud - free food app (CalHacks 2.0) **October 2015**

- Developed an Android App that finds free food events from Facebook.
- Used Graph API from Facebook and Android Studio
- Parsed through JSON files from Facebook to select and display certain events onto App.

Skills

- Python, Kotlin, Java, C, Android Studio, Git, Office 365 API, Django, Docker, Celery, Sql, Sbatch, SLURM, ipython, Unity, Spark, Nginx, Gunicorn, Graph API (from Facebook), Cadence, Pico Pro, Gridlab-d

Relevant Coursework

Computational Photography (CS194-26) • (Operating Systems and Systems Programing (CS162) • Introduction to the Internet: Architecture and Protocols (CS168) • Microelectronic Devices and Circuits (EE105) • Introduction to Electric Power Systems (EE137A) • Efficient Algorithms and Intractable Problems (CS170) • Introduction to Database Systems (CS186) • Great Ideas in Computer Architecture (CS61C) • Energy and Society (Erg C100) • Designing Information Devices and Systems I & II (EE16A & EE16B) • Discrete Mathematics and Probability Theory (CS70) • Data Structures (CS61B) • Energy Engineering Seminar • Structure and Interpretation of Computer Programs (CS61A)