

Loren Jiang

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Education

University of California, Berkeley

Berkeley, CA

BS BIOENGINEERING, MINOR: ELECTRICAL ENGINEERING & COMPUTER SCIENCES

Aug 2014 - May 2018

GPA: 3.61

Skills

Backend Django • Django REST Framework • PostgreSQL • Python (pandas, NumPy, SciPy)

Frontend React • Vue • Redux • JavaScript • HTML/(S)CSS

Build tools Git • AWS (S3, EC2) • WebPack • Docker • CI/CD (Travis, Gitlab)

Experience

EcoCart.io

Remote

SOFTWARE ENGINEER INTERN

May 2020 - present

- EcoCart is a e-commerce API that integrates sustainability into online shopping. Current projects include:
 - frontend and backend integrations on the Shopify app and merchants admin panel

UCSF Macromolecular Structure Group

San Francisco, CA

STAFF RESEARCH ASSOCIATE

Sep 2018 - Dec 2019

- Developed software to streamline research and administrative workflow for the X-Ray Crystallography facility
 - hitsDB, a full stack Django web app to streamline data collection; image classifier for protein crystallization detection; lab billing system using Python scripts to aggregate usage data from Google forms
- Maintained and trained users on robotic equipment and related software to reduce user error and equipment downtime (protein crystallization imagers, high-throughput liquid handlers)

Biomimetic Millisystems Lab

Berkeley, CA

ROBOTICS UNDERGRADUATE RESEARCHER

Jun 2017 - Sep 2018

- Designed and characterized novel electrostatic actuator technology for miniaturized applications (2-DoF micro-mirror, milli-scale robot) under guidance of Ethan Schaler Ph.D. leading to two second-authored publications
- Applied actuator technology to develop miniaturized cell shaker for summer research fellowship at UC Berkeley

Projects

hits-db

Django, PostgreSQL, jQuery, S3

APP TO STREAMLINE DATA COLLECTION FOR UCSF RESEARCH PIPELINE

hitsdb-demo.herokuapp.com

- Designed database schema to best represent the experimental data that would be collected and wrote custom queries and transactions using Django ORM to optimize SQL performance
- Tested views and models using Python packages Factory Boy and Faker, as well as Coverage to gauge test effectiveness

xtal-classifier

Python, Docker, FastAi

PROTEIN CRYSTAL IMAGE CLASSIFIER USING RESNET34 DEEP LEARNING

xtal-classifier.onrender.com

- Trained and deployed as web app a model with an accuracy of 85% using ResNet34 CNN

fpl-compare

React/Redux, Material-UI, React-vis

STATS COMPARISON APP FOR FANTASY PREMIER LEAGUE (FPL)

fpl-compare.herokuapp.com

- Webscraped external football websites using Selenium and used API provided by FPL to provide rich, custom datasets
- Used Uber's react-vis charting library to visualize underlying data trends

misoboop

Django, PostgreSQL, DigitalOcean

SHOWCASE WEBSITE THAT FEATURES PERSONAL RECIPES AND CAT

github.com/loren-jiang/misoboop

- Built using Django + PostgreSQL backend and jQuery/Javascript + Materialize CSS, hosted on Digital Ocean

Featured

PUBLICATIONS

- Schaler, E. W., Jiang L., & Fearing, R. S. (2018) Multi-Layer, Thin-Film Repulsive-Force Electrostatic Actuators for a 2-DoF Micro-Mirror. *Actuator 2018, Bremen, Germany.*
- Schaler, E. W., Jiang L., Lee C., & Fearing, R. S. (2018) Bidirectional, Thin-Film Repulsive-/Attractive-Force Electrostatic Actuators for a Crawling Micro-Robot. *MARSS 2018, Nagoya, Japan.*