

Kira Prabhu

Education

Carnegie

Mellon

University

B.S. Computer
Science,
Minor in
Computational
Biology

Dean's List Fall
2015, Spring 2016,
Spring 2017
GPA: 3.58

Skills

Python, C++, C, Java,
Objective C, Go,
Javascript, Cuda, Clojure,
ClojureScript, PHP, HTML,
PostgreSQL, Bash Shell,
Perl,

Coursework

- Machine Learning
- Computer Vision
- Neural Computation
- Quantitative Cell and Molecular Biology Lab
- Computational Methods for Biological Modeling and Simulation
- Cloud Computing
- Security and Cryptography
- Distributed Systems
- Functional Programming

Work Experience

Google, Software Engineer (SWE), AR R&D | Oct 2019-present

- Augmented reality (AR) team working on 3D human capture and rendering
- Computer vision research including descriptor development, multi-view stereo optimization, and development of novel techniques to assess room lighting for human capture

Google, Site Reliability Engineer (SRE), Ads Build | May 2018-Oct 2019

- Managed throughput, latency, and reliability of several ads serving pipelines
- Performed optimization and automation of resource allocation and usage

Google, SRE Internship, Cloud Performance Monitoring | May-Aug 2017

- Full stack design and implementation of 'SmartSort', an outage management tool feature that suggests services associated with a user in order to improve the user experience and efficiency of outage reporting
- Utilized Go, Spanner, gRPC, Polymer JS, HTML

Zillow, SWE Internship, iOS Team | May-Aug 2016

- Launched new 'Collections' and video walkthrough features for Apple TV, created a new 'Filters' interface, and redesigned the app home page
- Utilized XCode and Objective C with Reactive Cocoa and MVC paradigms

Kirasystems, Inc. SWE Internship | May-Aug 2015

- Company profile: Machine learning contract analysis. Customers are major corporations. Over \$100B transaction value processed to date.
- Designed and developed interactive visualizations for machine learning clustering data and governing law contract clauses using the D3 library
- Utilized Clojure, Clojurescript, Om, PostgreSQL, Javascript, HTML, CSS

Selected Projects

Generated Textures | Dec 2019-March 2020

- Personal project to first synthesize images of novel textures based on patterns in nature using generative adversarial networks, then visualize them as 3D surfaces

Research with Systems Biology Group | Jan 2017 - May 2017

- Automated retrieval of single-cell RNA expression data and extraction of source cell type information in order to start a user-friendly scRNA database, and develop a cell type classifier for novel sequence data

Distributed Collage Generator with Two-Phase Commit | April 2017

- A photo collage generator implemented in Java using distributed transactions and two-phase commit to achieve collage consensus from all contributors

Video Tracking | April 2016

- Implemented the Lucas-Kanade, Matthew-Baker, and Mean-Shift tracking algorithms to track moving objects in video clips

"Bag of Words" Object Classification | February 2016

- Created a scene classifier by constructing a dictionary of visual words, using it to develop a recognition system, and evaluating the system on test images