

# 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

### Governor

**Livingston HS**  
May 2014

## 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
- Cloud Computing
- Security and Cryptography
- Distributed Systems
- Functional Programming
- Intro to Computational Biology

## 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 lighting assessment
- Utilized C++, Python, and Cuda

### 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

### "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 image