

+1 (213) 476 6063 www.neerajsamtani.me neeraj.j.samtani@gmail.com www.github.com/neerajsamtani www.linkedin.com/in/neerajsamtani

### **EDUCATION**

University of California, Los Angeles B.S. Computer Science | GPA: 3.77 Expected June '22

## **WORK EXPERIENCE**

Automated Reasoning Group | Al Researcher June 20 - Present

 Researching Structured Bayesian Networks (SBNs), which were recently proposed for representing and learning distributions over highly complex spaces. SBNs can accommodate background knowledge while learning from data.

## Honey | SWE Intern (Deferred)

Summer '20

• Deferred due to COVID-19

## At HUM | SWE Intern

July '19 - September '19

- Optimized the asset import workflow into **Unreal Engine 4** with **C++ and Python**, which reduced import time by 8000%.
- Automated virtual house furnishing in Unreal Engine 4 based on room size and user preferences. This enabled artists to quickly prototype designs and helped the startup scale its software.

# ESRI | SWE Intern

July '17-August '17

- Developed plugins in C++ and Bash to provide support for WEBP and PDF formats in ArcGIS using the open-source library GDAL.
  Wrote user documentation for these plugins.
- Collaborated with a team of interns to write an automated testing script in Python which compared image statistics and verified support for various file formats.

## **TOP PROJECTS**

# DrugDecider | Engineering Manager

- Led a team of 5 software engineers to develop DrugDecider, a
  health app that uses machine learning to predict a patient's
  treatment response to anti-psychotics (partnered with the UCLA
  School of Medicine)
- Tools: React, Node, Express, MongoDB, R, and AWS

# Books For A Cause | Independent Project

- Created a website which enables students to trade used textbooks.
- Spearheaded a marketing campaign which led to 450+ users signing up within the first two months.
- Trained four students to maintain and update the website.
- Tools: HTML, CSS, JavaScript, PHP, and MySQL

## RELEVANT COURSEWORK

Algorithms and Complexity, Operating Systems, Programming Languages, Artificial Intelligence, Computer Graphics, Multivariable Calculus, Discrete Math, Linear Algebra

### **HONORS AND AWARDS**

Upsilon Pi Epsilon Honor Society, Member UCLA Chapter, Inducted Spring 2020 Dean's Honors List

UCLA, Spring 2019 and Fall 2019

Valedictorian

GEMS Modern Academy, 2018

Runner-Up, Mobile App Competition GEMS-Keita Mobile App Making Competition, 2018

Euclid Mathematics Contest Medal School Topper and Top 20% Worldwide, Center for Education in Mathematics and Computing, 2018

**K.S. Varkey Merit Scholarship** GEMS Education, 2016 - 2018

#### **LANGUAGES**

Python, C, C++, JavaScript, Bash, Lisp

# FRAMEWORKS + SOFTWARE

Linux/Unix, Git, React, Node, Express, MongoDB, WebGL, Adobe Creative Cloud

#### **PUBLICATIONS**

How Would Quantum Computing Impact the Security of Bitcoin by Enhancing Our Ability to Solve the Elliptic Curve Discrete Logarithm Problem? (August 2018).

Top Ten download list in the Computing Methodology eJournal and CompSciRN: Cyber Attack (Topic).

Link: https://ssrn.com/abstract=3232101