# Neeraj Samtani

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## **Education**

University of California Los Angeles • B.S. Computer Science • GPA 3.72

Sept 2018 - June 2022

Coursework: Object-Oriented Programming, Algorithms and Complexity, Operating Systems, Computer Networks, Database Systems, Programming Languages, Artificial Intelligence, Machine Learning, Computer Graphics, Multivariable Calculus, Discrete Math, Linear Algebra

## **Experience**

#### Amazon • Software Development Engineer Intern

Jun - Sept 2021

Created internal tools with Java to improve developer productivity on the Alexa Weather team.

#### Automated Reasoning Group UCLA • Undergraduate Researcher

Jun - Oct 2020

Implemented example use-cases for Structural Bayesian Networks , which were proposed for learning distributions over highly complex spaces. Advised by Professor Adnan Darwiche, former chairman of the UCLA Computer Science Department.

#### AtHUM • Software Engineering Intern

Jun - Sept 2019

Optimized the asset import workflow in Unreal Engine 4 with C++ and Python, which reduced import time by 8000%. Automated virtual house furnishing based on user preferences, thus enabling artists to quickly prototype designs.

#### **Esri** • Software Engineering Intern

Jul - Aug 2017

Developed plugins in C++ and Bash to provide support for WEBP and PDF file 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.

## **Projects**

codirector 2020

Built a website for filmmakers to create and distribute interactive films, similar to Netflix's *Bandersnatch*. Increased accessibility for independent filmmakers by making this software free and open source (competitors charge \$500+ per month). Tools: React and Firebase

#### **DrugDecider • Engineering Manager**

2019

Led a team of 5 software engineers to develop DrugDecider, a mental health app that uses machine learning to predict a patient's treatment response to anti-psychotics. Partnered with the UCLA School of Medicine to launch the product.

Tools: React, Node, Express, MongoDB, R, and AWS

Books For A Cause 2018

Created a website which enables students at GEMS Modern Academy to trade used textbooks. Spearheaded a marketing campaign which led to 450+ users signing up within the first 2 months. Trained 4 students to maintain and update the website.

Tools: HTML, CSS, JavaScript, PHP, and MySQL.

### **Skills**

Languages: Python, C, C++, JavaScript, Java, Lisp, OCaml, Bash, HTML/CSS

Frameworks & Technologies: Linux/Unix, Git, React, Node, Express, MongoDB, Firebase, AWS, Heroku, WebGL

### **Honors & Awards**

Upsilon Pi Epsilon Honor Society, Member: UCLA Chapter (Inducted Spring 2020)

Dean's Honors List: UCLA School of Engineering (Spring 2019 and Fall 2019)

Valedictorian: GEMS Modern Academy (2018)

Top Ten Download List in Computing Methodology eJournal: How Would Quantum Computing Impact the Security

of Bitcoin by Enhancing Our Ability to Solve the Elliptic Curve Discrete Logarithm Problem? (August 2018)

Runner-up, App Making Competition: GEMS-Keita Mobile App Making Competition (2018)

Euclid Mathematics Contest Medal: School Topper and Top 20% Worldwide, CEMC (2018)

K.S. Varkey Merit Scholarship: GEMS Education (2016-2018)