

# Ishaan Gandhi

[US Citizen]

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## EDUCATION

### Harvey Mudd College

BS in Computer Science & Math  
2017-2021  
3.9 GPA

### Thomas Jefferson High School for Science and Technology

2013-2017  
4.4 GPA

## SKILLS

Python, C, C++, OCaml,  
Haskell, Java, Go, Swift,  
SQL, Bash, Git, Flask, JS,  
React, AWS, Kafka, Mongo

## COURSEWORK

### Systems

Computer Systems  
Data Manipulation at Scale  
Databases  
Operating Systems  
Parallel Computing  
Programming Languages  
Software Verification

### Theory

Advanced Algorithms  
Algorithms  
Algorithmic Game Theory  
Artificial Intelligence  
Computability & Logic  
Deep Learning  
Model Theory  
Machine Learning

## TEST SCORES

### ACT: (99.9 percentile)

Math: 36/36  
English: 36/36  
Reading: 36/36  
Science: 36/36

## AWARDS

Harvey S. Mudd Scholar  
National Merit Scholar  
National AP Scholar

08.16.2020

## EXPERIENCE

### ETH Zürich

Feb 2020 - Jul 2020

#### Research Assistant, Advanced Software Technology

- Taking a semester off school to work in the computer science department of the *Swiss Federal Institute of Technology*.
- Currently building coverage-guided fuzzers for SMT solvers and profilers for symbolic executors using C++ and Python.

### Facebook

Summer 2019

#### Software Engineer Intern, Place Visit Detection

- Implemented 2-pass scoring in Facebook's machine learning model for place visit detection, increasing model AUC by 0.74pp.
- Worked on prediction service and training workflow in C++ and Python respectively.

### Facebook

Summer 2018

#### Software Engineer Intern, Real Time Infrastructure

- Increased the security of FB's pub-system by adding cryptographic authentication.

### Capital One

Summer 2017

#### Software Engineer Intern, Commercial Bank

- Worked on full stack development for an IOT sensor network. Built a real-time dashboard and wrote a REST API.

### NASA

Jun 2016 – Jun 2017

#### Student Researcher

- Wrote Monte Carlo simulator to study the performance of various data compression algorithms on space telescopes.
- Sped up image data processing for my research group 600x from Hubble Space Telescope using scripts.

## PROJECTS

### Shell Notebook

Built a terminal replacement for Mac. Sold to paying users on Mac App Store. Check it out at [shellnotebook.com](http://shellnotebook.com)

### Symbolic Executor

Hired by Harvey Mudd's CS department to design a project for the *Applied Logic* course. Wrote a symbolic executor for a subset of Python.

### iOS App Development

Built and published games and utilities for iPhone and iPad using Objective-C and Swift. Received over 50,000 downloads and made about \$2k in sales.

### Golang cross compiler

Wrote a basic cross compiler to turn Python code into Go. Won 1st place and around \$1k in prizes at CU Hacks.

### Python Static Analysis Tool

Wrote a static analysis tool to find bugs in Python scripts. Won 1st place and around \$700 in prizes at 5C Hacks.