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

05.03.2020

EXPERIENCE

ETH Zürich   Feb 2020 - Pres.
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

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.