Ishaan Gandhi

EXPERIENCE

ETH Zürich, Research Assistant, Advanced Software Technology Lab — Feb 2020 - Present

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

Facebook, Software Engineer Intern, Place Visit Detection — Summer 2019

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, Software Engineer Intern, Real Time Infrastructure — Summer 2018

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

Capital One, Software Engineer Intern, Commercial Banking — Summer 2017

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

NASA, Student Researcher — Jun 2016 - Jun 2017

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 ulies 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.

EDUCATION

Harvey Mudd College, Claremont, CA — BS in Computer Science & Math, 2021 — 3.9 GPA

Dean's list every semester, Harvey S. Mudd Scholar

Selected Coursework: Computer Systems, Data Manipulation at Scale, Databases, Operating Systems, Parallel Computing, Programming Languages, Soware Verification, Advanced Algorithms, Algorithmic Game Theory, Artificial Intelligence, Computability & Logic, Deep Learning, Model Theory, Machine Learning

SKILLS

Languages: Python, C, C++, OCaml, Haskell, Java, Go, Swift, SQL, JS

Tools, Libraries, and Frameworks: Bash, Git, Flask, React, AWS, Kafka, Mongo

ishaangandhi.com 571-340-5413

igandhi@hmc.edu