Vijay Ramamurthy

United States Citizen

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EDUCATION

CARNEGIE MELLON UNIVERSITY   Pittsburgh, PA | May 2019

B.S. in Computer Science, Minor in Mathematics | GPA: 4.00/4.00

EXPERIENCE

FACEBOOK/META

Software Engineer   Menlo Park, CA / Remote | July 2019 - January 2022

- Engineer on Flow, an open-source programming language used by tens of thousands of developers
- Led cross-team effort to build codebase indexer powering new IDE-like features in widely-used code browser
- Built feature to expose relevant doc-comments in IDE tooltips
- Developed feature providing automatic quickfixes for misspelled variables, fields, and methods
- Designed novel use of type inference and data flow information to provide intelligent autocomplete suggestions
- Drove investigations into IDE performance and reliability issues, resulting in over 80% decrease in bad experiences
- Scoped and managed intern project, shipping new feature that factors out selected code into helper function
- Resolved various conflicting views on Go-To-Definition feature's intended behavior by writing detailed specification
- Developed cryptography-based resolution to RCE security vulnerability in open-source VSCode extension

Software Engineer Intern   Menlo Park, CA | Summer 2018

- Restructured typechecker code to produce typed AST, allowing for 50% improvement in query success rate

MICROSOFT

Software Engineer Intern   Redmond, WA | Summer 2017

- Built system to find and visually expose dependencies between big data jobs
- Highlighted potential privacy holes by finding connected components in data lineage

CARNEGIE MELLON UNIVERSITY

Research   Pittsburgh, PA | August 2017 – May 2019

- Created and wrote thesis on program equivalence algorithm that reduces instructor grading workload by up to 87%
- Work was later published in OOPSLA 2020 conference ⬀

Teaching Assistant   Pittsburgh, PA | August 2016 – May 2019

- Head TA for 200 student intro course: interviewed 40+ candidates to assemble course staff of 15+ who I managed, leading creation and grading of all homeworks; Rebuilt autograder around new rubric-based design for fairer grading
- Courses taught: introductory functional programming, parallel algorithms & data structures, compilers

Course Founder and Instructor   Pittsburgh, PA | January 2018 – May 2019

- Cofounded still-running course on programming language theory, complete with exams and autograded homeworks

CCC INTELLIGENT SOLUTIONS

Machine Learning Intern   Chicago, IL | Summer 2016

- Built solution to use Mechanical Turk to rapidly sanitize and tag photo data for computer vision

Machine Learning Intern   Chicago, IL | Summer 2015

- Created utility to denormalize relational data for storage in DynamoDB

SKILLS

Proficient: OCaml • JavaScript • Python • LSP • VSCode • Unix/Linux • Mercurial

Familiar: Haskell • PHP • HTML/CSS • SQL • Node.js • C# • C++ • C • Java • git • Unity