Prem Chintalapudi

5109 Campion Dr., San Ramon, CA 94582 | premc@mit.edu | 925-216-1580 | https://pchintalapudi.github.io/home

Education

- Massachusetts Institute of Technology (4.9/5 GPA) .
  - BS Computer Science & Engineering + Bioengineering (May 2022)

Courses

Software Design and Engineering	Computer Architecture	Introduction to Machine Learning
Performance Engineering	Introduction to Embedded Systems	Probability and Random Variables
Design and Analysis of Algorithms & Data Structures	Computer Systems Engineering	Computational Systems Biology

Work Experience

doc.ai **January 2021 – February 2021**

Software Engineering Intern

- Digital IRB Clinical Protocol Parsing
  - Developed program in Python to section text of clinical trial protocol PDFs and classify text blocks into regions of interest
  - Built significant sections of frontend and backend prototype web app to display capabilities

McAfee, LLC **May 2020 – August 2020**

Software Engineering Cloud Security Intern Cloud Security BU Engineering

- Connected Apps Security
  - Added controls to endpoints to prevent unauthorized access to resources using Spring Security
  - Implemented new REST endpoints for aggregating and normalizing data for chart display
  - Developed automation test suite for UI components using Cypress to test application loading, access control, and application base load time

Sandia National Laboratories (CA) **June 2019 – August 2019**

Undergraduate Summer Intern R&D

- Investigated antibacterial properties of mesenchymal stromal cells using CRISPRa/CRISPRi
- Performed bacterial work (Cloning, Minipreps, Maxipreps), cell lines + bacterial co-culture assays

Personal Projects

Mini Virtual Machine *C++* (June 2020 - present)

- Bytecode interpreter modeled similarly to the JVM, written in C++
- Garbage collection, virtual memory allocation/deallocation, template metaprogramming
- Associated bytecode compiler written in C++ (tokenizing, parsing, compiling)

Course Planning Application *Vue/Typescript* (December 2019 – January 2020)

- Graphical and responsive planning of courses using web technologies; intuitive user interface
- Rendering pipeline optimization, CSS animation/transitions

Skills

- Python, Java, C++, Typescript, Javascript, SQL, HTML, CSS, SVG, Cypress, Spring Boot, Vue