Yichuan Philip Ma

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https://yichuanma95.github.io/ • United States Citizen

QUALIFICATIONS PROFILE

Highly technical, hands-on engineer and software development professional with at least one year of genuine coding experience ready and capable to succeed in a challenging **Software Engineer** role.

- **Software Solutions:** Construct unique, innovative software solutions that meet and often far exceed the client's/stakeholder's expectations. Utilize a variety of programming languages to assist in development.
- **Key Strengths:** Cybersecurity, Software Engineering, Machine Learning, Artificial Intelligence, Probability & Statistics, Web Programming, Object-Oriented Programming, Proficient in Mandarin Chinese, Basic Proficiency in French.
- **One full year of Coding experience**

Core Technologies:

Programming Languages:	Java, Python, C++, C, JavaScript, HTML/CSS
Applications:	MATLAB, Bash, Git, R, MongoDB, Node.js, Cypress.io, LaTeX, CUDA

EDUCATIONAL BACKGROUND

Bachelor's of Science in Computer Science, *magna cum laude* – 5/2018
Tufts University – School of Engineering, Medford, Massachusetts

CERTIFICATIONS

- *PCAP - Certified Associate in Python Programming, Python Institute. Certificate earned on October 1, 2018. Verification Code:* **VL5S.XrSx.dyVp**
- *Java Programming and Software Engineering Fundamentals, a 5-course specialization by Duke University on Coursera. Specialization Certificate earned on July 12, 2017.*

ONLINE CODING PRESENCE

HackerRank ID: yichuan_ma
Badges: Problem Solving, gold; Java, gold (rank 1)
Problem Solving problems solved: 114 easy, 38 medium, 5 hard, 1 advanced
Java problems solved: all 64 (48 easy, 16 medium)

EXPERIENCE HIGHLIGHTS

Secure Remote Password Testing and Acceleration, 9/2017 – 5/2018
Department of Computer Science, Tufts University

Successfully implemented a 2048-bit modular exponentiation (MODPOW) operation program in CUDA C that runs on the GPU to accelerate the Secure Remote Password (SRP) protocol.

- Capstone project for my Senior year at Tufts University.

Software Engineer (Internship), 5/2017 – 8/2017   TriNetX Inc., Cambridge, Massachusetts

Championed all data analysis with SQL and R. Gathered data and proposed solutions to complex problems and to guide the future development for features within the TriNetX Live™ application.

- Closely tracked SonarQube and proactively repaired problems in the application's Java codebase. Significantly reduced the amount of error logs while maintaining its back-end functionality.
- Authored integration tests with JavaScript and Cypress.io that covered all elements of the application's front-end processes. Drastically improved availability, functionality, and efficiency.