

Alan Yee

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EDUCATION

UIUC

MASTER - COMPUTER SCIENCE
December 2025 | Champaign, IL
GPA: 4.0

UC SAN DIEGO

BS IN MATH-COMPUTER SCIENCE
June 2018 | La Jolla, CA
Provost Honors

LINKS

Github:// [alanyee](#)
LinkedIn:// [alayee](#)

COURSEWORK

GRADUATE

Applied Machine Learning
Deep Learning for Healthcare
Computer Security
Text Information Systems
Database Systems
Data Curation
Data Visualization
Quantum Information

UNDERGRADUATE

Programming Languages
Cryptography
Operating Systems
Design and Analysis of Algorithms
Automata Practicum
Software Engineering
Advanced Data Structures
Theory of Computability
Discrete Mathematics
Object-Oriented Design

ONLINE

Machine Learning
Cryptography
Algorithms: Design and Analysis
Data Science
Quantum Computation

SKILLS

PROGRAMMING

Python • Golang • C++ • C • Rust
JS • SQL • Ruby • Java • HTML
Haskell • \LaTeX • Bash • PHP • CSS

TECHNOLOGIES

Distributed Systems • PyTorch • AWS
TensorFlow • Docker • Terraform • Linux
REST • RPC • GCP • Git • CICD

WORK EXPERIENCE

TIKTOK | SOFTWARE ENGINEER

Nov 2021 – Present | Mountain View, CA

- Build, design, and improve infrastructure and strategies for Ads measurement for removing duplicate traffic, handling abuse, monitoring business logic and system health, compliance, etc. with Golang, Python, and databases
- Optimize resource usage in Ads measurement infrastructure, saving over 10,000 CPU cores, reducing over 60% in CPU and memory usage
- Lead, develop, design, and scale backend architecture and distributed systems for various digital wellbeing and privacy features in the TikTok app including Refresh your For You feed (patent co-owner), Screen time, Sleep reminders, parental controls, etc. with Golang, RPC/API services, and databases

INTUIT | SOFTWARE ENGINEER

June 2018 – Oct 2021 | Mountain View, CA

- Develop, maintain, and lead projects surrounding distributed systems, an internal platform, REST API, and SDKs (Python, Golang, C++) for the Red Team, security automation, and vulnerability management
- Automate security infrastructure in Python, Terraform, Docker, and AWS
- Perform penetration testing based on CVEs and other common exploits – the biggest discovery affected hundreds of different internal cloud services
- Analyze web traffic and internal data to combat adversaries via BigQuery
- Host and record an internal course for teaching practical applications of Python and general software engineering best practices

SAN DIEGO SUPERCOMPUTER CENTER | RESEARCH ASSISTANT

Mar 2015 – June 2018 | La Jolla, CA

- Developed software in Python and C++ for an international data placement lab
- Boosted and tested experimental network protocol over high-speed networks

INTUIT | SECURITY ENGINEER INTERN

June 2017 – Sept 2017 | San Diego, CA

- Collaborated with Threat analysts in the Red Team, using machine learning algorithms to defend against adversaries and monitor Dark Web activities, using Python, TensorFlow, scikit, and Google BigQuery
- Contribute to the TensorFlow project

INTUIT | SOFTWARE ENGINEER INTERN

June 2016 – Sept 2016 | San Diego, CA

- Delved into TCP/IP and network programming in Python, SQL, and Ruby with the Product Infrastructure and Network Automation team

SAP LABS | SOFTWARE DESIGN AND ENGINEER INTERN

June 2015 – Aug 2015 | Palo Alto, CA

- Migrated on-premise and Amazon Web Services (AWS) analytical solutions to new cloud platform through XSJS, Node.js, SQL, and Jenkins

ACCENTURE TECHNOLOGY LABS | SUPPORT ANALYST

June 2014 – Aug 2014 | San Jose, CA

- Worked on the Data Insights Research and Development Group to create data visualizations of over 675,000 chess endgames using a Python parser and D3.js
- Collaborated with the Digital Experience Research and Development Group to construct an IoT security device through REST API based on MVC architecture of MongoDB, Jade, and Mongoose through Node.js framework

MARTINEZ RESEARCH GROUP AT STANFORD | RESEARCH INTERN

June 2013 – Aug 2013 | Stanford, CA

- Improved the back-end of the NVIDIA GPU-based quantum chemistry simulation and its haptic interface through C and C++