TAI-YU CHEN

Los Angeles, CA | (909) 255-5323 | taiyuchen33@gmail.com | linkedin.com/in/taiyuchen33 | utahorange.github.io

EDUCATION

UNIVERSITY OF CALIFORNIA, LOS ANGELES   *Los Angeles, CA*
B.S. Computer Science   *Expected June 2027*
Student Organizations: *Bruin AI*
Relevant Courses: *Data Structures and Algorithms, Linear Algebra, Discrete Mathematics, Statistics and Probability*

WORK EXPERIENCE

SOFTWARE ENGINEERING INTERN   *Los Angeles, CA*
Bruin AI   *Sep 2024 - Present*
- Developed a real-time color analysis app for DeepLearning.ai to generate personalized color palettes based on user skin tone, lip color, and eye color, leveraging Python (OpenCV) for image processing, Google Cloud Vision API for feature extraction, and React/Flask for a seamless UI.

SOFTWARE ENGINEER   *Bethesda, MD*
Air Force Association   *March 2023 - June 2024*
- Led a team in designing and developing a script to automate Windows security configurations, achieving over 90 percent system compliance in competitions. Utilized Git for version control, facilitating collaboration, version tracking, and code quality assurance. Followed recommendations from the DoD's Security Technical Implementation Guides (STIGs).

RESEARCHER   *Virtual*
University of Pennsylvania   *April 2023 - Present*
- Collaborated with a UPenn postdoc to develop a machine learning model with XGBoost, classifying malicious network traffic with 91% accuracy using the Colorado University Pentesting Dataset. Lead author on paper for arXiv publication.

NATIONAL CHAMPION TEAM CAPTAIN, NETWORKING AND WINDOWS LEAD   *Bethesda, MD*
Air Force Association CyberPatriot Competition   *Aug 2020 - June 2024*
- Placed 1st nationally out of 5000+ teams and 2nd in the Cisco Networking Challenge in a premier cybersecurity competition.
- Led team in securing enterprise networks by implementing protocols (DHCP, NAT, OSPF) and configuring site-to-site VPNs to meet client requirements and DoD STIGs, while maintaining Windows service uptime during active red team engagement.

LEAD CURRICULUM DEVELOPER AND INSTRUCTOR   *Fullerton, CA*
Troy High School Cyber Defense   *Aug 2021 - June 2024*
- Developed and taught curriculum (slideshows, Packet Tracer labs, assessments) for Computer Networking classes on topics like DHCP, NAT, and OSPF, serving 300+ students in the nation's largest cybersecurity program.
- Led instructors, delegating weekly and long-term tasks to ensure smooth operations.
- Authored SOP for organization-wide procedures, ensuring consistency for future instructors.

LINUX AND WINDOWS SYSTEM ADMINISTRATOR   *Pomona, CA*
Cal Poly Pomona SWIFT Red vs Blue   *Aug 2020 - Present*
- Placed 1st in Red vs Blue engagement, competing against nationally ranked collegiate teams.
- Mitigated vulnerabilities on Windows Server, CentOS, and Ubuntu using tools like Nmap and Iptables, while maintaining service uptime (MySQL, SSH, SMB, AD/DC, DNS, Apache2) against an active red team.
- Addressed real-time business tasks and communicated professionally with company leadership in a simulated business network.

CRYPTOGRAPHY AND REVERSE ENGINEERING SPECIALIST   *Fullerton, CA*
"Wackers" team on CTFtime   *June 2021 - Present*
- Competed in national CTF events, placing 56th in the nation (CTFtime), SoCal Cyber Cup 2023 Finalist, 14th in National Cyber League 2021, and 4th in California Mayor's Cyber Cup 2022.
- Authored Python scripts (Crypto, Pwntools) to exploit encryption flaws, publishing writeups on GitHub.
- Developed challenges for future CTF competitions.

SKILLS

Programming Languages: *Python, C/C++, Java, Powershell, Bash, Cisco IOS, LaTex*
Tools/Frameworks: *Git, Vim, VS Code*