Tam Khai Vo

Sac State ID: 304293665 · Sacramento, CA · 916-318-1125 · tamvo@csus.edu · https://github.com/tamkhaivo

Objective: Ambitious and mission-oriented computer science student, with the primary objective to expand my knowledge in not only my domain but be transferable in other disciplines to solve the more difficult problems of my generation.

Technical Skills: Coachable, Listener, Organized, Communicator, Problem-Solver, Password-Cracking, Forensics, Cryptography, Log Analysis, Network Traffic Analysis, Network Scanning, Enumeration and Exploitation, Web-Application Security, Front-End Web Development, Accessible and Responsive Web Design, Cross-Domain Collaboration, Web Page Optimization; Coding Standards and Review, Web API Programming,

Technology Tools: React, Next.JS, Node.JS, JavaScript, SQL, Python, Linux, Hashcat, Jira, Azure, BurpSuite, WireShark, Git

Professional Experience

Engineer Analyst - GlobalLogic – Sunnyvale, CA – May 2023 - October 2023
Hired to improve the Bard AI for the Japanese audience. Examined tickets to ensure compliance with community standards. Designed and developed web-based tools and applications with HTML5, CSS3, and client-side JavaScript to support CI/CD pipelines for AI software development. Worked with highly complex data volume to create ad-hoc analysis and reporting.

- **Independently programmed internal tools to improve quality of life** improved live feedback in testing environment
- **Analyzed and categorized over 1,000 ambiguous responses from Bard AI.**

Data Analyst - Corporate Tax Incentives, LLC – Folsom, CA – November 2020 - May 2023
Researched, qualified, and calculated Employee Retention Credit for various types of businesses. Managed technology resources for scraping efforts. Supervised and mentored a direct report. Additionally, served as the Head Researcher for utilizing technology to analyze government websites for COVID-19-related orders, including the federal government as well as all 50 states and their counties, townships, and cities.

- **Paved the way for $2.5M in increased revenues** performed a root cause analysis to identify unoptimized tax allocations
- **Achieved a 100x increase in output** through converting a PDF extraction process via Python from manual to automated format.
- **Eased the process for scraping COVID-19-related orders (saving 3 hours per day)** from government websites by engineering a new data collection and analysis process. Used Python, Selenium, Scrapy, MongoDB, and React with Node.js to scrape 1,000+ websites and store historical data.

K-12 Project Manager - Educational Testing Service (ETS) – Sacramento, CA – May 2018 - May 2020
Maintained and optimized 3 critical testing websites for daily operations (3M visitors annually) involving standardized testing throughout California. Used OpenText Web Experience to improve UX for user accessibility.

- **Streamlined searches for 1,000s of files (involving schools throughout California)** by building a front-end database
- **Reduced overall bandwidth usage by 20%, with zero negative effects on usability** by automating web file optimizations
- **Improved all 3 websites by introducing aria labels for dynamic content.** Enabled achievement of WCAG 2.1 AA compliance as a result, meeting accessibility standards that allowed a broader range of individuals to use the websites effectively.
- **Increased responsiveness for the user significantly** through optimizing cache criterias to a Content Delivery Network.
- **Created automatic scripts to optimize PDFs for the web** reducing total costs by a factor of 500 from 10 MB to 5-100KBs.

High School Swim Coach - Elk Grove Unified School District (EGUSD) – Elk Grove, CA – May 2016 - May 2019
Facilitated an open learning environment to prepare young teenagers for the challenges that they may face in the future, both with consequences and rewards.

- **Utilized swimming as a vessel** for developing a student's aptitude to express all range of emotions
- **Facilitated an emotional and physical growth** for a team of 25 young adults
- **Documented personal milestones** and projections and setting realistic expectations

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Education

College Education in Computer Science

SACRAMENTO STATE UNIVERSITY COLLEGE – 3.3 GPA - Undergraduate - Sacramento, CA – August 2024 - May 2026

Cyber Security Club - Sacramento, CA

National Cyber League (NCL) CTF Competition

Placed 90 out of 7302 in a Cybersecurity competition designed to test subject matter expertise in different domains in the Cybersecurity field (specializing in Password Cracking, Web Exploitation, and Traffic Analysis).

- **Password Cracking** – Determine potential patterns and create custom wordlists using Hashcat and John the Ripper.
- **Web Exploitation** – Analyzed and crafted payloads for backend frameworks in pursuit of exploiting their current functionalities through packet sniffing (using Burp Suite).
- **Network Analysis** - Extracted and analyzed network traffic through raw binaries to reconstruct steganography practices.

Data Structures and Algorithms (DSA) - Sacramento, CA

Director of Education

Responsibilities include the teaching and guiding the trajectory of the club. Utilizing Leetcode for Algorithms and SQL exercises to score top marks in both time vs space computation complexities. Coordinating use of complex data structures such as arrays, hash tables, linked lists (queues and stacks), trees, heaps, and graphs. Practicing concepts such as Dynamic Programming, Bit Manipulation, and linear transformations to solve complex algorithmic problems.
Usage of Advanced SQL Queries to cut down computation time use of Aggregations vs Partitions, or individual column use of where.

Sacramento Society of Quantum Engineers - Sacramento, CA

Treasurer

Responsibilities include marketing outreach, budgeting, and detailed note taking. Utilizing IBM Quantum Learning Platform as a starting point to Quantum Computing. Understanding the importance of Single System, Multiple Systems, Quantum Circuits, and Entanglement are fundamental to accelerating Quantum Research in solving specialized complex problems.

Mathematics, Engineering, Science Achievement (MESA Program) - Sacramento, CA

1 out of 500 Students of MESA that is dedicated to recruit, retain, professionally develop, and graduate students with degrees in engineering, computer science. Actively involved in extending resources to fellow students and creating life-long relationships.

Society of Women Engineers (SWE) - Sacramento, CA

Active Ally in the pursuit of creating an inclusive environment for women engineers in a predominantly male industry. Making a safe space for ideas to be challenged, broken down, and honing the potential and leadership abilities for everybody.

Girls Who Code - Sacramento, CA

Active Ally to bring forth the potential of underrepresented minority groups, low income backgrounds, and educational status, by increasing the exposure and access to computer science concepts. Not only building resilient, persistent, and ambitious minds, but accepting the diverse background of every individual with the goal to create a place of belonging.

Data Science Club (DSA) - Sacramento, CA

Projects include dissecting and creating simple AI Models from Big Data and looking at the inferences that the AI concluded.

Video Game Design Club - Sacramento, CA

Created Ball Balancing Minigames Unreal and Unity. Designed collision logic and used 3rd party textures and lighting.

Bouldering Team - May 2024 - Sacramento, CA

Collegiate Athlete dedicated to improving self-esteem through teamwork, personal development, team problem solving, and engaging activities. Participated ages from 12 - 35 year olds.

LOS RIOS COMMUNITY COLLEGE – 3.3 GPA - Sacramento, CA

National Cyber League - May 2021 - May 2023

Placed 130 out of 6237 in a Cybersecurity competition designed to test subject matter expertise in different domains in the Cybersecurity field (specializing in Cryptography, Forensics, and Enumeration and Exploitation).

- **Cryptography** – Identify techniques used to encrypt or obfuscate messages and leverage tools to extract the plain text.
- **Forensics** – Utilize the proper tools and techniques to analyze, process, recover, and/or investigate digital evidence in a computer-related incident.
- **Enumeration and Exploitation** - Identify actionable exploits and vulnerabilities and use them to bypass the security measures in code and compiled binaries.