

BENJAMIN LIU

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EDUCATION

California Polytechnic State University, San Luis Obispo <i>B.S. in Computer Science, GPA: 3.64/4.0, Dean's List</i>	Sep 2020 - Jun 2023 San Luis Obispo, CA
• Coursework: Data Structures, Systems Programming, Design & Analysis of Algorithms, Computer Organization, Operating Systems I + II, Network Security, Multivariable Calculus, Linear Algebra	

WORK EXPERIENCE

Amazon Web Services <i>Junior Systems Development Engineer</i>	Apr 2022 – Present San Luis Obispo, CA
• Security Infrastructure team	
California Polytechnic State University, San Luis Obispo <i>Computer Science Research Assistant</i>	Jun 2021 – Aug 2021 San Luis Obispo, CA
• Designed, implemented, and tested text-based assistant to collect multiple software developer tools in one location in Node.js by processing REST API data	
Boeing <i>Engineering Intern</i>	Jun 2019 – Aug 2019 Huntington Beach, CA
• Researched systems testing and analysis for military underwater vehicles	
• Designed extra small unmanned underwater vehicle (XSUUV) system with a team of interns	
• Collaborated in subteam to design mothership that transports and deploys the XSUUV	
• Created solution to remove sea urchins to prevent overeating of kelp forests	

ACTIVITIES

Cal Poly Linux Users Group President (2022 - 2023)	Sep 2020 – Present
• Attend weekly Linux discussion and help sessions	
• Current project: configuring package mirror server for Arch Linux repositories	
Cal Poly Security Education Club Vice President (2022 - 2023)	
• Attend weekly technical talks on various cybersecurity concepts	
• Compete in weekly capture the flag (CTF) competitions	
Troy Cyber Defense Linux instructor (2019 - 2020)	Aug 2016 – May 2020
• High school cybersecurity club with 335 students and 60 teams	
• Taught Linux security to over 100 students each week	
• Created presentations for teaching and virtual images for simulating competition scenarios	
• Competed and prepared students for Air Force Association's Cyberpatriot competition	
Various competitions	
• CyberPatriot XII Semifinals	17th/6000+ teams (Jan 2020)
• CyberPatriot XII State Round	25th/6000+ teams (Nov 2019)
• picoCTF (hosted by Carnegie Mellon University)	60th/28000+ teams (Oct 2019)

PROJECTS

Threading Library for Lightweight Processes	Feb 2022
• Implement user-level threading library in C that shares a single thread's resources between multiple threads	
• Maintains unique stacks to enable context switches between threads using a custom scheduler	
dongman-bot github.com/liubenjamin/dongman-bot	
dongman-bot github.com/liubenjamin/dongman-bot	Oct 2020
• Developed Discord bot that notifies users of new anime episodes and manga chapters	
• Written with discord.py API wrapper to parse RSS feeds and request data via AJAX API	

SKILLS

Languages: Java, Python, C, C++, JavaScript, Bash
Technologies: Linux, Git, MongoDB, Express, React, Node.js