BRADLEY CAO

+1 (703) 459-4158 | bradleycao@gmail.com | Great Falls, VA, USA | linkedin.com/in/bradleycao | bradleycao.dev/

EDUCATION

Georgia Institute of Technology   **May 2024 - December 2026**
Bachelor's, Computer Science   *GPA: 3.82*
  - Cybersecurity + Intelligence Threads
  - Dean's List

University of Maryland - College Park   **August 2023 - May 2024**
Bachelor's, Computer Science   *GPA: 3.87*
  - Dean's List

PROFESSIONAL EXPERIENCE

Georgia Tech Research Institute   **Phoenix, AZ, USA**
Software Engineering Intern   *May 2025 - Present*
  - Developed containerized IoT solutions hosted on Cisco IR1101 router for Air Force threat system training, reducing hardware requirements by 33% and streamlining the development and deployment, enabling rapid scalability for production of hundreds of training systems
  - Engineered an embedded remote satellite-based relay control system for gas-powered generators to provide plug-and-play capabilities for Air Force range equipment globally utilizing Iridium SBD
  - Collaborated on and completed 20+ Jira tickets and feature requests for ANGEL training range software, developing tools and utilities with C# and .NET framework in Unity.

George Mason University   **Fairfax, VA, USA**
Research Assistant   *July 2023 - August 2023*
  - Utilized Python and fine-tuning of ChatGPT 3.5 LLM to create a chatbot for addressing community questions about climate change by integrating into a Flask based webpage

Thomas Jefferson High School for Science and Technology   **Alexandria, VA, USA**
Student Systems Administrator   *August 2021 - June 2023*
  - Lead Sysadmin managing and developing high school's computer systems lab resources, including compute cluster, Linux workstations, school intranet, and other ancillary resources
  - Git repository manager of open source intranet, as well as internal Gitlab instance managing and deploying a variety of servers and their respective networking

PROJECTS & OUTSIDE EXPERIENCE

Multicast Mobile   *August 2022 - July 2023*
  - Developed a novel technology demonstration Android mobile application for IP multicasting live streaming via automatic multicast tunneling and multicast to unicast translation as part of research in collaboration with IETF MOPS and MBONED working groups; invited speaker at IETF 114 in the MBONED working group

Buzzcoin Miner   *March 2025 - April 2025*
  - Utilized Python to crack vulnerable hash puzzles with varying degrees of difficulty based on present vulnerabilities
  - Implemented Ethereum Keccak-256 hash algorithm in CUDA to work alongside single GPU CUDA script to brute force compute nonces for a Bitcoin style hashing puzzle

ADDITIONAL ACHIEVEMENTS

  - Placed top 1% out of 12,000+ teams worldwide in IMC Prosperity 3 Trading Competition, globally ranked 1st in PnL for first round of competition
  - Winner of Washington Post Challenge at HackTJ 9.0

SKILLS

Languages: Python, C/C++, C#, Java, Bash, JavaScript, HTML/CSS, PowerShell, SQL, OCaml
DevTools: Linux/Unix, Visual Studio, Docker, Linux CLI, Jenkins, Unity
Collaboration: Git, GitHub, Gitlab, Agile, Jira
Knowledge: Sockets, Computer Networking, Computer Architecture, Network Protocols
Libraries/Frameworks: NumPy, Pandas, Node.js, Arduino, Django, Bootstrap, Tensorflow, PyTorch