Bradley Cao

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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 - August 2025*
- 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

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 website platform

George Mason University   **Fairfax, VA, USA**
Serious Game Development Intern (ASSIP)   *June 2022 - August 2022*
- Principal developer, designer, and leader of "The Cold Front", a serious game development project raising awareness on the war in Ukraine, built in Unity with C#
- Demonstrated the use cases of serious games in promoting important messages to players on the importance and relevance of global geopolitical events in everyday lives

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
- Spoke as an invited speaker at Internet Engineering Task Force meeting 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 106th 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, Java, HTML/CSS, C/C++, C#, OCaml, Rust, Bash, PowerShell, JavaScript, CUDA, Unity, Solidity
DevTools: Linux/Unix, Visual Studio, IntelliJ, Docker, Unity, Git, Ansible
Libraries/Frameworks: Arduino, Pytorch, Jupyter, NumPy, Node.js, Bootstrap, Django, Tensorflow
Collaboration: GitHub, Microsoft, Agile, Atlassian, Jira