Bradley Cao

bradleycao@gmail.com | (703) 459-4158 | linkedin.com/in/bradleycao | github.com/bradley-cao

Education

Georgia Institute of Technology **Atlanta, GA**
B.S. in Computer Science | Expected graduation May 2026
University of Maryland **College Park, MD**
Thomas Jefferson High School for Science and Technology **Alexandria, VA**

Coursework

Computer Systems | Discrete Structures | Organization of Programming Languages | Algorithms | Machine Learning | Computer Vision | Artificial Intelligence

Skills

Languages: Python, Java, C#, C++, HTML/CSS, JavaScript, C, OCaml, Rust
DevTools: Git, Linux, Visual Studio Code, IntelliJ, Jupyter Notebooks, Docker, Unity
Libraries and Frameworks: NodeJS, OpenCV, NumPy, Pandas, Matplotlib, PyTorch, Tensorflow, Flask

Experience

Thomas Jefferson High School for Science and Technology **Alexandria, VA**
Student System Administrator (Sysadmin) **June 2021 - June 2023**

- Co-Lead Sysadmin managing the school network (separate from school system network)
- Developed and maintain open source technological resources used by students and faculty on daily basis including school intranet, webmail, workstations, compute clusters, signages

George Mason University **Fairfax, VA**
ASSIP Summer Internship **June 2022 - August 2022**

- Internship under Professor Sang Nam from the Virginia Serious Games Institute
- Developed a serious game with Unity for raising further awareness about geopolitics with regards to the Cold War and the Russia-Ukraine war

George Mason University **Fairfax, VA**
Research Assistant **July 2023 - August 2023**

- Conducted research on applications of GPT-3.5 LLM for community driven causes such as raising awareness on climate change by utilizing Python and fine-tuning GPT for a chatbot

Projects

Multicast Mobile

- Python based mobile application developed as tech demo for multicast off-net streaming
- Utilizes FFmpeg streaming codecs and connectivity via UDP to multicast infrastructure
- IETF 117 speaker in support of TreeDN RFC proposal as part of Multicast to the Grandma (MTTG) Initiative alongside IETF MOPS and MBONED working groups

News Comparator

- NLP Hackathon project utilizing NLTK to semantically compare sentiments of words to determine factual similarity of sentences in online news articles as a tool against disinformation