**AMEYA KULKARNI**

ameyakulk06@gmail.com | (214) 897-5440 | [LinkedIn](http://linkedin.com/in/ameya-kulkarni-40a94323a/) | [GitHub](https://github.com/AmeyaKulkarni37)

**EDUCATION**

**Duke University August 2024 – May 2028**

*Bachelor of Science in Computer Science | Bachelor of Science in Mathematics* Durham, NC

**GPA:** N/A

**Relevant Coursework:** Data Structures & Algorithms, Data Science in R, Intro to Economics

**Coppell High School August 2020 – May 2024**

**GPA:** 3.94/4.00 | SAT: 1560/1600 | Math: 790/800 | Reading & Writing: 770/800 Coppell, TX

**Honors:** 2023 ISEF Special Award Winner & Fair Finalist, Ranked #21/20k+ on National Policy Debate Coaches Poll, 2x Policy Debate Tournament of Champions Qualifier, 9th/7k+ at National Technology Student Association Conference, National Merit Commended, NSDA Academic All-American, AP Scholar with Distinction

**PROFESSIONAL EXPERIENCE**

**UT Southwestern Medical Center** **June 2023 – June 2024**

*Computational Biology Research Intern* Dallas, TX

* Developed multiple convolutional neural network (CNN) models for nuclear segmentation and cell classification in kidney and colon clear cell renal cell carcinoma (ccRCC) cancer tissue using PyTorch
* Optimized machine learning workflow and increased existing lab model performance metrics by 15-20%; experimented with different batch normalization techniques, epoch counts, and input patch sizes
* Annotated 100+ microscope images in QuPath and utilized Groovy scripts to streamline the data processing pipeline, increased lab dataset size by 50% which resulted in a 5-10% increase in each model’s performance

**Coppell Debate Academy** **June 2022 – June 2024**

*Debate Instructor* Coppell, TX

* Taught 2 hour weekly classes to 500+ middle school students about the fundamentals of speech and debate, worked as lead instructor for the policy debate lab and led a team of 6 instructors
* Led public speaking drills, organized research sessions, judged practice debates, and provided constructive feedback
* Volunteered and assisted in organizing the Coppell Classic tournament for 2 years with over 1,000 competitors

**Kumon North America**  **June 2021 – January 2022**

*Math and Reading Tutor* Coppell, TX

* Tutored 100+ students of grades K-9 in mathematics and reading comprehension; taught a wide variety of topics from basic addition to pre-calculus and received excellent feedback from clients
* Administered and graded curriculum, homework, and tests; collaborated with a team of 10+ instructors

**EXTRACURRICULAR INVOLVEMENT**

**Duke Delta Sigma Pi Business Organization** **September 2024 – Present**

*Member* Durham, NC

* Selected as one of 25 out of 300+ applicants, participated in rigorous 9-week new member education program, networked with current members and alumni to develop skills in the finance, consulting, and technology industries

**International Science Fair Competitor**  **August 2022 – May 2023**

*Team Leader*Dallas, TX

* Designed a novel machine learning algorithm to predict venom and toxin protein molecular functions based on amino acid sequences to assist in determining how these compounds can be repurposed into medicine
* Worked with TensorFlow/Keras to train a neural network with 95.6% validation accuracy and 0.95 F1 Score
* $40,000 Special Award winner and Fair Finalist at 2023 Regeneron International Science and Engineering Fair (ISEF)

**Coppell Speech and Debate August 2020 – May 2024**

*Vice President and Policy Debate Captain* Coppell, TX

* Ranked #21 out of over 20,000 policy debaters on the National Policy Debate Coaches Poll, achieved Top-3 finishes in multiple national tournaments of 100+ participants, 2x qualifier to the Tournament of Champions
* Organized weekly practices of 300+ members, coached novice debaters, prepared 100+ evidence packets and files
* Researched and advocated for governmental policy cases on AI, biotechnology, cybersecurity, economics, domestic & foreign policy, critical race theory, water protection, and criminal justice reform

**SKILLS & INTERESTS**

* **Skills:** Java, Python, PyTorch, TensorFlow/Keras, Sklearn, R, JavaScript, HTML/CSS, React, Bash, Git, Word, Excel, Adobe Tools
* **Interests:** Astrophotography, Card Games, Dallas Sports, Chess, Card Magic, Weightlifting, Swimming, Formula 1