Anthony Song

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RESEARCH INTERESTS

- Autonomous Vehicles, Internet of Things (IoT), Data Science, Computer Vision, Machine Learning, AI

SKILLS

- Programming Languages: Python, Java, R, HTML, CSS
- Operating Systems: Windows, Linux (Ubuntu and Arch-Linux)

EDUCATION

Cornell University, Ithaca, NY (Computer Science in the College of Arts and Sciences) Aug. 2023–May 2027 (expected)

University of Connecticut (Early College Experience), Storrs, CT Aug. 2020–May 2023

- Unweighted GPA: 3.97/4.0
- **Courses Taken:** CSE2050 Data Structures and Object-Oriented Design, CSE3666 Computer Architecture, CSE2500 Introduction to Discrete Systems, Math 2110Q Multivariable Calculus, Math 2210Q Applied Linear Algebra

Edwin O Smith High School, Storrs, CT Aug. 2019-Jun. 2023

- Unweighted GPA: 3.97 out of 4.0 (top 1% of class 2023)

RESEARCH EXPERIENCE

Group Leader, Autonomous Car High School Research Project, University of Connecticut Jun. 2021-Aug.2023

- Led a high school research team under the guidance of Professors Fei Miao, Caiwen Ding, and Eric Jackson
- Constructed a prototype autonomous vehicle and wrote python scripts to automatically detect lanes/obstacles
- Proactively organized group discussions to plan activities and to distribute work assignments
- Presented a research poster and demo of our prototype car on behalf of the group at the ACM/IEEE International Symposium on Low Power Electronics and Design (ISLPED) in Boston, August 2022
- Collaborated with graduate students on setting up a new 2023 Quansar QCar Autonomous Car System and the QCar testbed at UConn's Connecticut Transportation Institute

Research Fellow, The Jackson Laboratory for Genomic Medicine Nov. 2021–Apr. 2023

- Conducted an independent study of 180+ hours under the guidance of Professor George Weinstock
- Assisted graduate students to collect experimental data on mice gut bacteria obtained from fecal pellets
- Constructed machine learning pipelines using Python and R languages to analyze and understand the influence of the gut microbiome (community of bacteria) on addictive disorders
- Report analyzed results and project progress to fellow researchers and discuss the follow-up research plans
- Published an article in International Journal of High School Research (IJHSR) (accepted in April 2023)

Researcher, European Organization for Nuclear Research (CERN) Beamline for Schools Competition Aug. 2019–Apr. 2023

- Wrote experiment proposals and python scripts to perform numerical simulations on the three designed experiments: Bremsstrahlung radiation, Parametric X-Ray radiation, and Muon lifetimes

EXTRACURRICULARS

Founder, Coding Club at E.O. Smith Highschool Aug. 2020–June 2023

- Organized workshop on creating websites using HTML and CSS and gaming software
- Reformed the classroom attendance system (using Java and Python) to improve classroom management efficiency

Web Master, Cultural Awareness Brigade at E.O. Smith Highschool Aug. 2021–June 2023

- Designed and created the club website to organize and advocate events

AWARDS & ACHIEVEMENTS

- **Jackson Laboratory Academic Year Fellowship 2021-2022**
- **Beamline for Schools Shortlisted 2021** Top 24 team out of 289 international teams, top 2 in the USA
- **2022 Quahog Ocean Bowl 2nd place in CT and RI**
- **President's Volunteer Service Award (Bronze)**

HOBBIES

- Hiking, Kayaking, Cooking, Videogames, Board/Card Games

WEBSITE, PROFILE, PORTFOLIOS

- **Personal Website:** https://anthonybsong.github.io
- **GitHub:** https://github.com/AnthonyBSong
- **LinkedIn:** www.linkedin.com/in/anthony-song-887760270