




Keshav Ganapathy

 keshavganapathy.github.io

 keshavg@umd.edu

 linkedin.com/in/keshavganapathy

 keshavganapathy

Education

University of Maryland

Intended Bachelor of Science in Computer Science and Mathematics Minor: German

- GPA: 4.00/4.00

 Expected May 2025

 College Park, MD

Skills


Proficient: *Python (Sklearn, Pandas, Numpy, TensorFlow, PyTorch)* • *Java* • *CSS/SASS* • *SSML* • *Git* • *LaTeX*

Familiar: *JavaScript* • *C++* • *Svelte* • *C#*


Select Projects

WebPoint Portfolio - WebPoint | *HTML, CSS, Pug, SCSS, JavaScript* | Organization Portfolio: [here](#)  June 2020 - March 2021

- * Led development of websites and oversaw three main departments: designing, programming, and marketing.

Harmony | *Svelte, WebRTC, Web Audio API, CSS, peaks.js, HTML, Pug, SCSS, JavaScript* | MIT Blueprint 2020  February 2021


- * Created a web application in a team of 4 that allows for near-synchronous collaboration for musical education.

BrainFun | *Brainf*ck, HTML, CSS, JavaScript, Vue.js, Firebase* | Same Home Different Hacks 2020  June 2020

- * Created a web application in a team of 4 that teaches kids logical thinking via the esoteric programming language Brainf*ck.

Work & Research Experience

University of Maryland REU-CAAR


 Jun 2020 - Aug 2020, Jun 2021 - Present

Researcher, Mentor: Tom Goldstein

 College Park, MD

- * Selected out of 30 high school students to join an undergrad team to conduct machine learning (ML) and statistics research
- * Led a team of three in ML and statistics research
- * Analyzed the ML conference review process using statistical tools, such as logistic regression models, and ANOVAs
- * Created a data set of over 8000 conference papers using the OpenReview API, Selenium, and web scraping tools
- * Co-first authored a paper presented at the ICLR 2021 townhall and selected as a lightning talk at Navigating the Broader Impacts of AI Research NeurIPS 2020 Workshop

Johns Hopkins Applied Physics Laboratory


 Jun 2020 - May 2021

ASPIRE Intern (Air and Missile Defense Sector), Mentor: Joshua McClellan

 Baltimore, MD

- * Used the Ray python reinforcement learning library to run and develop learning scenarios related to research under NDA
- * Implemented a Kalman and Moving Average Filter for noise reduction and produced a research poster comparing the filter algorithms presented at the APL ASPIRE student showcase

iZen

 Jun 2019 - Aug 2019

Intern

 Palo Alto, CA

- * Developed text to speech programs using SSML, C#, and Google Cloud's Text to Speech AI to generate roughly 6 hours of educational content on artificial intelligence and machine learning

Publications & Preprints

Tran, D.¹, Valtchanov, A.¹, **Ganapathy, K.¹**, Feng, R.¹, Slud, E., Goldblum, M., & Goldstein, T. (2020). Analyzing the Machine Learning Conference Review Process. NeurIPS 2020 Workshop on Navigating the Broader Impacts of AI Research. arXiv preprint arXiv:2011.12919.

Ganapathy, K.¹. (2020). A Study of Genetic Algorithms for Hyperparameter Optimization of Neural Networks in Machine Translation. arXiv preprint arXiv:2009.08928.

Awards & Honors

- Recipient of the \$10,000 AFCEA-CMD Merit Scholarship.
- Simons Summer Research Program 2020 Admit (8% Acceptance Rate)
- 2nd Place in Best Health Tech Hack at DefHacks Virtual 2020 (Over 1200 attendees)
- 1st (2020) & 3rd (2021) place at FBLA Regionals for Website Design, 2x State Qualifier. 4th Place Website Design FBLA State Conference, National Qualifier.
- 1st Place in Wolfram Programming at hackUMBC 2019
- QuHacks - 1st Place in 2019, 2nd Place in 2018