

Vinay Bhaip

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github.com/vbhaip

EDUCATION

- **University of Virginia** Charlottesville, VA
Computer Science, Mathematics; GPA: 4.0 *Expected Graduation May 2023*
 - **Activities:** Echols Scholar (Top 5% in college), Jefferson Society, Solar Car, Open Data Project.
- **Thomas Jefferson High School for Science and Technology** Alexandria, VA
Computer Systems Research; GPA: 4.5 *Sep 2016 – Jun 2020*
 - **Relevant Coursework:** AP Computer Science + Data Structures, Artificial Intelligence, Parallel Computing, Web Development, Mobile Development, Computer Vision, AP Physics, Linear Algebra.

EXPERIENCE

- **Chartbeat** New York City, NY
Backend Engineer Intern *Jun 2021 - Present*
 - **Data Warehouse Migration:** Exploring options such as Redshift and BigQuery to consolidate data warehouse.
- **Howard Hughes Medical Institute** Ashburn, VA
Jayaraman Lab Intern; Looger Lab Intern *Jun 2019 - Aug 2020*
 - **Behavior Analysis:** Identified decision-making regions of the fly brain, measured by a $\sim 84\%$ accurate novel ensemble machine learning model, using computer vision to analyze results. Second Place in Virginia Science Fair.
 - **Protein Synthesis:** Correlated possible calcium indicators of neural activity to likelihood of success, measured by Spearman's ρ of ~ 0.7 , by developing transformer machine learning model.
- **Phone2Action** Rosslyn, VA
Civic Tech Engineering Fellow *Jun 2018 - Aug 2018*
 - **Facebook Messenger Bot:** Expanded on award-winning hackathon project, developing a chatbot to connect users to grassroots campaigns using natural language processing. Released first-ever advocacy chatbot to clients.

ACCOMPLISHMENTS

- **HackNY Fellow:** Joined community of fellows ($\sim 1\%$ acceptance rate) to learn about NYC startup ecosystem and develop social good project for nonprofit.
- **UVA Hackathon:** Built video lecture summarizer (lecturenoted.tech) using NLP, winning best educational hack.
- **Stanford TreeHacks:** Developed machine learning powered posture correction system, winning grandprize in healthcare category at hackathon with roughly 2000 participants.
- **2x AIME Qualifier:** Qualified by being in top 5% in nation for American Invitation Mathematics Examination.
- **HackTJ:** Developed an integrated code-teaching platform for students. Received Overall Best Beginner Application, 3rd place for Palantir Social Impact Award, and top 10 Big Parser API Usage.

LEADERSHIP

- **Machine Learning Club**
Captain, Teaching Coordinator *Sep 2018 – May 2020*
 - **Lecturing:** Taught machine learning concepts, writing original lectures in topics like Recurrent Neural Networks and Adversarial Neural Networks, to nearly 60 students every week.

PROGRAMMING

- **Languages:** Python, Java, C++, Javascript, SQL, HTML, CSS, LaTeX.
- **Libraries:** React, D3.js, Keras, Scikit-learn, TensorFlow, NumPy, OpenCV.
- **Technologies:** Linux, Bash, Git, Flask, Firebase, Heroku.