Vinay Bhaip

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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 ∼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 (∼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.