Ayush Garg

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**EDUCATION**

University of Richmond, Richmond, VA May 2026

*Bachelor of Science in Computer Science; Minor in Mathematics and Business Administration.*

**Cumulative GPA: 3.97/4.00**

* **Honors:** Richmond Scholar award (Meritorious full ride offered to 25 incoming students), Dean’s A-list (All semesters)
* **Relevant courses:** Algorithms, Business Statistics, Advanced Linear Algebra, Computer Organization

**EXPERIENCE**

**HohoKus Inc.**, Richmond, Virginia Dec 2023 – Present

Software Engineering Intern

* Develop an ERP application in Flask + Postgres and redesign the company databases saving over 24 hours every week.
* Engineer scripts to automate key aspects of the manufacturing workflow, yielding a 20% reduction in manual labor.
* Research a shape recognition model for aerospace parts, enhancing identification accuracy and manufacturing efficiency.

**Grounded Natural Language Processing Lab,** University of Richmond, Virginia January 2023 – Present

Research Assistant

1. Research grounded NLP to translate human instructions into computer-executable commands to simulate video games
2. Develop a deep understanding of machine learning and its domains under the guidance of Dr. Catherine Finegan-Dollak
3. Prepare a literature review paper and propose a neural network architecture with a greater accuracy than current models

**Technology Learning Center,** University of Richmond, Virginia May 2022 – February 2023

Instructional Technology Assistant

1. Provided assistance to students and faculty in software, and other computer-related queries, averaging 10+ hours per week
2. Organized technology workshops and training sessions for students and faculty, enhancing campus-wide digital literacy.
3. Managed internal communication using a ticketing system as well as designed marketing material for social media platforms

**Lion Befrienders,** Singapore, Singapore September 2021 – March 2022

Technology Intern

* Developed a client-side chatbot in JavaScript that can be easily injected into a webpage, reducing support costs by 300%
* Led the development of a gamified scam simulator with video courses, sensitizing 200+ elderly in Singapore.
* Collaborated with the team to pitch a presentation to President of Singapore, Halimah Yacob, at the DigitalForLife festival.

**Docanalysis,** Remote May 2021 – April 2022

Lead Developer

1. Implemented semantic analysis of documents with Dr. Daniel Mietchen through spaCY in [a user-friendly Python package](https://github.com/petermr/docanalysis)
2. Increased processing speed by more than 400% compared to a human, saving 10 hours for every 50 analyzed papers

* Extracted ethic statements from research papers and got research idea [published in Research Ideas and Outcomes](https://www.researchgate.net/publication/366695125_Mining_the_literature_for_ethics_statements_A_step_towards_standardizing_research_ethics)

**Pygetpapers,** Remote February 2021 – December 2022

Lead Developer

* [Designed CLI](https://github.com/petermr/pygetpapers) under Dr. Peter Murray Rust to retrieve scientific papers from repositories, used by 45000+ researchers
* Increased efficiency by 10 folds compared to manual downloads and got published in the [Journal of Open-Source Software](https://joss.theoj.org/papers/10.21105/joss.04451)
* Designed automated workflows and testing to ensure reliability and extended support to include any open-source library

LEADERSHIP & activities

**Deep Point Lab**, Richmond, Virginia April 2023 – Present

Co-Developer

* Conduct market and order flow analysis in $6bn+ gaming asset marketplace and found market inefficiencies exceeding 15%
* Developed an automated investment script to buy underpriced assets, making a consistent 3%+ gross profit every 14 days

Hackathon, Multiple Locations September 2020 – Present

Mentor and Developer

* Lead development of projects such as financial app Finlearn and mentor students on API development and login systems
* Received prestigious awards at University of Virginia, University of British Columbia, and Nanyang Technical University

SKills & Interests

Skills: Python, JavaScript, Java, GitHub, HTML5, CSS, MySQL, CLI integration, Flask, firebase, pandas, ReactJS, VueJS, Hindi

Interests: Cooking, Public Speaking, Physical Fitness, Innovation, Valorant