

# Kai Dove

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## EDUCATION

### University of Virginia, School of Engineering and Applied Science

Charlottesville, VA

Bachelor of Science in Computer Science

August 2022 – May 2026

GPA: 3.92

Relevant Coursework: Data Structures/Algo, Computer Systems and Organization, Software Development Essentials, Discrete Mathematics, Probability, Linear Algebra, Adv Software Web Development.

## RELEVANT PROJECTS

### Image Analysis for Cancer Detection

September – October 2023

- Designed and implemented a high-performance medical image segmentation API leveraging Fast API and TensorFlow, aimed at the real-time detection of cancerous cells in microscopic imagery.
- Integrated a python client for API testing, using OpenCV and Matplotlib for visualization, utilizing GitHub for version control.
- Enhanced diagnostic precision by 10% with a custom-tailored machine learning model and integrated an interactive Java based front-end and back-end built with JUnit software test cases.

### Personal Portfolio Website,

June - September 2023

- Utilizes the power and flexibility of React and HTML/CSS/JavaScript to facilitate a dynamic and responsive user experience, coupled with Firebase for seamless backend management, ensuring secure and efficient data handling.
- Showcases detailed project insights through an interactive portfolio section, alongside integrated social media links and a direct communication channel facilitated by EmailJS, all streamlined under Git version control.

### GPT Investment Banker,

July - September 2023

- Developed an AI-powered investment banker application using LangChain and OpenAI. The app performs real-time financial analysis on annual reports, generating insights like net profit.
- Ensured robust code quality, including regular peer code reviews, continuous integration, and adherence, and collaborated closely with members to align technical implementations.

### Product Identification Project,

March - June 2023

- Developed a product recognition model using Convolutional Neural Networks (CNNs) using Python and TensorFlow, achieving high accuracy and performance with software testing.
- Designed and developed a user-friendly web interface using React/HTML/CSS/JavaScript for image uploads and product identification, ensuring seamless user experience.

## WORK EXPERIENCE

### Mathnasium, Tutor

Fall 2021 - Spring 2022

- Accomplished a more engaging learning environment by implementing creative problem-solving exercises which led to higher student participation and enthusiasm.
- Liaised with teachers and leaders to adapt to the COVID-19 pandemic.

## LEADERSHIP, HONORS, AND EXTRACURRICULAR ACTIVITIES

### Korean Student Association, Member

Fall 2022 – Present

- Organized cultural events and workshops to promote Korean heritage and foster community engagement.

### Hoo Hacks, Team Member

September – May 2023

- Managed logistics and technical setups for the annual hackathon, ensuring a smooth event for over 300 participants, and participating by starting my own developed project.
- Partnered with tech companies to secure sponsorships and prizes, elevating the profile of the event.

## SKILLS

**Programming Languages:** Python, Java, HTML/CSS, TypeScript, JavaScript, SQL, C++,  
**Tools:** APIs, Git, VSCode, Firebase, React/Node.js, Slack.