# ANDREW HONG

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## **EDUCATION**

#### University of Virginia, Charlottesville, VA

### **Bachelor of Arts in Computer Science**

August 2023 - Present

- Cumulative GPA: 3.847
- Coursework: Linear Algebra, Statistics, Computer Systems and Organization, Data Structures and Algorithm, Discrete Math, Multivariable Calculus, Software Engineering
- Technical: Python, Java, C#, JavaScript / Typescript, HTML5, CSS, React, Svelte, AWS, SQL

#### WORK EXPERIENCE

## Mobile App Developer, Charlottesville, VA

I-S2EE Lab (UVA Department of Civil and Environmental Engineering)

September 2024 - Present

- Lead 3-person team to create Struct-AR, an AR mobile application for iOS and Android targeting structural engineering education, reducing engineering stress concept learning time by 25%
- · Utilize Unity 3D and Vuforia AR SDK to design interactive stress visualizations for 10 types of building structures
- Implement Unity Cloud logging to monitor 40+ student interactions and usage metrics

#### Research Assistant, Charlottesville, VA

Ultimate User Interface Lab (UVA Department of Computer Science)

August 2024 - Present

- Coauthored CHI 2025 conference paper ("Things2Reality") on human-computer interaction, conducting a user study with 12 participants and 48
  questionnaires
- Analyzed user interactions with the Segment Anything Model and Large Multi-View Gaussian Model, enabling users to generate interactive 3D models from Google images in a VR environment
- Provisioned Flask server to connect data between Unity, AI models, and user voice chat

#### Teaching Assistant, Charlottesville, VA

UVA Department of Computer Science & Japanese Department

August 2024 - Present

- Lead weekly lab sessions and personal office hours for 45+ undergraduates in computer architecture, Assembly, and C programming
- Streamlined grading for 500+ CS students by configuring Gradescope's AI-assisted tools and defining scoring guidelines; reduced grading time by 80%
- Led 2 Japanese college students to achieve TOEIC scores above 900/990; facilitated career advancements through tutoring high-level English proficiency

#### Research Assistant, Fairfax, VA

UVA Department of Physics

May 2024 - August 2024

- · Designed and published an educational Unity game demonstrating gravitational wave concepts with a 4 person team
- Constructed advanced world generation logic, molecule simulators, and aim system, boosting player engagement by 40%
- · Orchestrated regular biweekly team meetings and maintained effective communication channels through Jira

# Junior Programmer, Bethesda, MD

Starlight Vintage Studios

May 2023 - June 2023

- Developed NPC and voice logic in Unity for the VR game "Give the People What They Want", increasing player engagement by 25%
- · Led live demos at marketing booth; Engaged 100+ visitors and gathered valuable player feedback to inform design adjustments
- $\bullet$  Resolved ~15 bugs identified during playtesting and updated the final build on Steam and the Meta Store
- Designed a tutorial with visual effects and refined mechanics, accelerating user familiarity with VR by 30%

### **PROJECTS**

# Computer and Network Security Club at UVA, Typescript, React, Tailwind

Frontend Developer

September 2024 - Present

- $\bullet \ \ Developing \ a \ webpage \ hypervisor \ using \ SvelteKit \ to \ allow \ provision \ of \ virtual \ machines \ with \ club \ server \ room \ infrastructure \ for \ around \ \sim \!\! 20 \ members$
- Designing process to convert JSON into Terraform HCL and Ansible YAML for seamless infrastructure management
- Utilizing Grafana to visualize and monitor virtual machine health metrics for ~20 machines; Integrated with Prometheus for real-time logging and performance tracking

# ACTIVITIES

### Comics and Animation International Exploration (Club), Charlottesville, VA

Treasurer

August 2024 - Present

- Managed over \$5,000 of club budget for events, conventions, hotels, club merchandise, and prints of club published magazines for ~40 regular members
- Developed and hosted a Discord bot using C# and the Discord.Net library, enabling user registration, item tracking, and allowing members to redeem points to win from a prize pool worth over \$400
- · Devised and hosted a static website to boost club publicity, increasing membership by 20% through enhanced online visibility
- Applied for ~\$3,000 in grants for funding; Design standardized Excel sheets for club budgeting