# KJ Kastning · kjk@skyhopper.net · (571) 486-6088 · LinkedIn

### **EDUCATION**

## Georgia Institute of Technology

Expected May 2028

Bachelor of Science, Computer Science

Atlanta, GA

- Related Coursework: Data Structures & Algorithms, Object-Oriented Programming, Multivariable Calculus
- Video Game Development Club, AI @ Georgia Tech, Big Data Big Impact

#### **EXPERIENCE**

### **COMET First Robotics Competition Team 1885**

August 2024 - June 2025

Outreach Webmaster, Scouting Lead

Haymarket, VA

- Designed a gamified scouting app (JavaScript, CSS) w/ intuitive controls & responsive UI, tripling scouting participation to ~10 simultaneous users; architected for compatibility w/ 4 platforms, minimizing input errors.
- Built analytics scripts (Python, NumPy, Pandas, Matplotlib) to compute & display match statistics across 60+ games via a console UI, informing strategy that advanced the team to Chesapeake playoffs (top 25/100 teams).
- Led a 3-person team to launch an AWS-hosted website (HTML, CSS, JS, S3, Git), creating 8 interactive pages by collaborating w/ design professionals to showcase over 15 outreach events; oversaw merge conflicts/branches.
- Engineered dual data-transfer methods: website uploads & a QR-code pipeline (Python OpenCV → JSON).

### Commonwealth Cyber Initiative & CGI Inc.

June 2024 - August 2024

Cybersecurity Intern

Fairfax, VA

- Evaluated 4+ static-analysis (SAST) AI tools on Java, Python & C# codebases via Git, scoring each on accuracy, false-positive rate, and language coverage; authored a 20-page report that guided security dept.'s tool adoption.
- Consulted 2 national nonprofits on cybersecurity best practices; developed and delivered an Agile-driven "Cybersecurity Essentials" workshop for presentation to 200+ non-technical members.
- Debated AI-ethics before 40+ tech industry professionals (Appian, Leidos, Google); led a 4-person team to 1st place in a cyber problem-solving competition using Linux, core security principles, and Python programming.

## **PROJECTS**

### CalcSpace: Calculus Space Survival Game

- Developed an educational survival game in Godot Engine (GDScript): implemented 50 unique math problems as in-game "power-ups" using OOP & class inheritance, enabling rapid querying of different problem types.
- Designed procedurally spawned abilities and enemy AI navigation to reinforce math skills in an engaging, action-packed format while remaining highly performant across different devices and on the web.

# WakeUpAlready Alarm Web App

- Developed a full-stack alarm application using Next.js/React, Supabase (Postgres) & Prisma for data storage, & NextAuth for secure sessions; enabled users to create, update, play, & save custom alarms w/local audio uploads
- Implemented whitelisted-user access to surface additional dashboard sections for privileged users; utilized ShadCN & Tailwind CSS for rapid prototyping and crafting a minimalistic, easy-to-use design.

#### AI Student GPA Predictor

• Built a RandomForestRegressor pipeline (Scikit-learn) on 2,392-record synthetic dataset; hyperparameter tuned via RandomizedSearchCV to reach 0.26 RMSE; identified Absences as the top factor to student grades.

### MNIST CNN Classifier (In Progress)

• Designing a conv. neural network in PyTorch to improve results on handwritten-digit recognition; originally created a feedforward NN w/ only Python and NumPy, implementing backprop algorithms from scratch.

## **SKILLS**

Languages: Python, Java, JavaScript, C#, C++, HTML/CSS, TypeScript, GDScript

Web, Frameworks, & ML: React, NumPy, Next.js, Pandas, Prisma, PyTorch, Supabase, Scikit-Learn, Tailwind Tools & Platforms: Git, Linux, Blender, Eclipse, VMWare, Arduino, Godot Engine, Unity, AWS (S3)