

Ishan Vepa

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EDUCATION

Georgia Institute of Technology

Master of Science in Computer Science: Artificial Intelligence

Atlanta, GA

Expected Dec 2026

Georgia Institute of Technology

Bachelor of Science in Computer Science

Atlanta, GA

Expected Dec 2025

GPA: 3.68 – Dean's List, Sidney Goldin Scholarship Recipient

- *Concentration:* Human-Computer Interaction
- *Relevant Coursework:* Data Structures & Algorithms, Object-Oriented Programming, User-Interface Design

EXPERIENCE

Undergraduate Research Assistant, Software Development

Aug 2024 – Present

Georgia Tech Sonification Lab and Design Studio

Atlanta, GA

- Partnered with Highcharts through sponsored research, leveraging hurricane data to improve comprehension of climate communications across **5+ accessibility profiles** and high-risk populations
- Implemented a JavaScript-based **ETL pipeline** to process **2,000+ data points** of hurricane and climate data
- **Skills:** Python, Pandas, Javascript, Highcharts API, GeoJSON, HTML, CSS, Figma

Augmented Reality Software Development Extern

Sep 2024 – Nov 2024

Snap Inc.

Remote

- Developed **3+ dynamic 2D/3D AR filters** themed around Premier League Soccer using Snap Lens Studio
- Increased user retention from **5 to 15 seconds** leveraging the Lens Scripting API for sentiment-driven effects
- **Skills:** Javascript, Figma, Snap AR Lens Studio

Software Engineering Intern

May 2024 – Aug 2024

Datamaxx Group

Tallahassee, FL

- Reduced user identity verification time from **1 minute to 20 seconds**, by developing an automated ID parsing and user face verification service in ASP.NET with AWS Textract and Rekognition API
- Enhanced user security screening efficiency for **100+ vendors** by implementing a QR code visitor check-in system
- Authored comprehensive documentation on both services for use by team of **20+ developers**
- **Skills:** C#, ASP.NET MVC, jQuery, HTML, CSS, SQL, AWS API

Undergraduate Researcher, Data Analytics Team Leader

Aug 2023 – Dec 2024

Georgia Tech Vertically Integrated Project

Atlanta, GA

- Refactored PI sponsor funding pipeline by parsing CSV data into Tableau dashboards for **\$1.3B** in annual research
- Leveraged Pandas to parse **150,000+ research grants** with **50 parameters** into a structured CSV format
- **Skills:** Python, Pandas, Figma, Excel, Tableau

PROJECTS

AI Academic Search Engine | *Next.js, React.js, Python, LangChain FAISS, BART, PERT, Flask, Pandas*

- Engineered a scalable **RAG** pipeline that ingests papers via academic journal APIs into FAISS vectorstore
- Enabled vector search for **200M+ abstracts**, designing **10+ REST** endpoints for query processing
- Fine-tuned **BART model** using **PEFT** to perform literature review through abstractive text summarization

Dungeon Crawler Android Game | *Java, Android Studio, XML*

- Built a "Luigi's Mansion" dungeon crawler Android game with **5+ levels** and **5 enemies**
- Using **MVVM architecture** and implemented design patterns: Strategy, Observer, Singleton, Factory

Computational Analysis of Contemporary Music | *Python, BeautifulSoup*

- Web-scraped **100+ Billboard Hot 100** songs across **10 years**, analyzing **1,000+ data points** in music

TECHNICAL SKILLS

Languages: Java, Python, C#, C, JavaScript, SQL, MySQL, HTML, CSS, TypeScript

Technologies: React.js, React Native, Next.js, Flask, ASP.NET, BeautifulSoup, Pandas, LangChain, JUnit, D3.js

Developer Tools: Git, Visual Studio, Android Studio, AWS Amplify, Accurev SCM

Design/Visualization Tools: Figma, Adobe Photoshop, Tableau