# Deekshitha Devarasetty

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# EDUCATION

## Georgia Institute of Technology

Atlanta, GA

Bachelor of Science in Computer Science

Expected Graduation: May 2026

- Related Coursework: Data Structures and Algorithms, Databases, Systems and Networks, Artificial Intelligence, Linear Algebra, Operating Systems, Networking, Internet Systems and Services, Computer Organization
- Extracurriculars: Society of Women Engineers, GirlsWhoCode, Amazon's Women of the World, GT Pickleball Team Captain

### EXPERIENCE

Mastercard

June 2025 – August 2025

Fullstack Software Engineer Intern

St. Louis, MO

- Developed a pipeline that transforms NL prompts into functional Spring Boot RESTful APIs built by Gradle
- $\bullet$  Reduced development time by 80% and deployed as a reusable internal tool
- Delivered a live technical demo to senior VPs and Directors, demonstrating end-to-end API creation, deployment to PCF, and integration with databases
- Coordinated with dev team in an Agile environment to accelerate feature delivery and enhance team productivity
- Created a Workday-integrated corporate card request prototype with workflow automation and API data exchange
- Collaborated with cross-functional teams to streamline request/approval pipelines and save time for employees

# Automated Algorithm Design VIP Lab

January 2024 – May 2025

Machine Learning Researcher

Atlanta, GA

- Developed a genetic programming framework that evolves human algorithms using Python, SQL, and more
- Constructed a LLM aimed at generating "perfect" individuals based on diverse input prompts
- Trained AI models utilizing ML with pandas, MATLAB, DEAP, and scikit-learn to generate accurate predictions
- Optimized human-competitive algorithms with standard set genetic program operators enabling MOGP

## Bromberg Lab

Data Analyst

May 2024 – June 2024

 $Atlanta,\ GA$ 

- Analyzed 12,000+ protein data sets with preprocessing and dimensionality reduction for clean ML analysis
- Investigated the relationship between enzyme similarity and cosine similarity distance in embedded vectors
- Utilized pandas, numpy, and sci-kit learn to assess the clustering of enzymes with similar EC numbers
- Generated visualizations and reports using ML to communicate findings and insights for research papers

## Projects

# GPT-2 LLM | Python, PyTorch, HuggingFace, HellaSwag, CUDA

- Modernized GPT-2 architecture from scratch by transitioning from TensorFlow to PyTorch
- Improved OpenAI's GPT-2 LLM, enhancing a 124M parameter model with 12 layers, and a 50257 vocab size
- Leveraged FineWeb's 10BT sample to train the model and the Hellaswag evaluation to improve accuracy
- Surpassed OpenAI's benchmarks by achieving a lower validation loss and a higher learning accuracy
- Demonstrated advanced expertise in neural network architecture and multi-GPU model training

# Foodify | MongoDB, Express.js, React, Node.js

- Developed a social food-tracking app where users share meals through photos and comments
- Utilized MongoDB as the database and React to ensure a dynamic and responsive user interface
- Leveraged Node.js to handle server-side logic and efficient routing for faster load times and improved scalability
- Employed Express is to create REST APIs for data handling and communication between front end and database
- Enabled user authentication and authorization, allowing users to log in, create, and edit posts

#### Course-it | Java, Kotlin, Android Studio, Git, Gradle

- Developed a comprehensive academic planning API in Android Studio using Java and Kotlin
- Designed the app to adapt to various schedules and class formats, providing a flexible planning tool for users
- Utilized Git for version control, managing commits, and changes to maintain a robust development process

## TECHNICAL SKILLS

Languages: Java, Python, C, JavaScript, Swift, SQL, Kotlin, HTML/CSS Frameworks: React, Node.js, Express.js, Spring Boot, Django, PyTorch, CUDA

Technologies: Git, Docker, Gradle, MongoDB, PostgreSQL, Xcode