

# ABHISHEK DHARMADHIKARI

Atlanta, GA, USA | 📞 4046418663 | ✉️ [ajd6@gatech.edu](mailto:ajd6@gatech.edu) | 🔗 [linkedin.com/in/abhishek-dharmadhihari](https://www.linkedin.com/in/abhishek-dharmadhihari) | 🌐 [abhi25072002.github.io](https://abhi25072002.github.io)

## EDUCATION

### Georgia Institute of Technology

August 2025 – May 2027

Master of Science in Computer Science

Atlanta, USA

- Relevant Coursework: Natural Language Processing, Machine Learning, Special Problems in Networking (RPKI & BGP Security)

### College of Engineering, Pune (COEP)

August 2019 – May 2023

Bachelor of Technology (Honors) in Computer Engineering, CGPA: 9.81/10, Rank: 1, Valedictorian [Transcript]

Pune

- Relevant Coursework: Operating Systems, Networking, Databases, Data Structures, Algorithms, Data Science, Cloud Computing, DevOps, Cryptography & Network Security, Object-Oriented Programming, System Administration, Software Engineering

## TECHNICAL SKILLS

Programming Languages:	C, C++, Python, Java, JavaScript, TypeScript, HTML/CSS, Shell (Bash), SQL, PHP, Assembly
Databases:	MySQL, MongoDB, Microsoft SQL Server, PostgreSQL, Chroma, Azure Cosmos DB
Frameworks & Libraries:	ETL, Django, Flask, React, Node.js, Angular, NumPy, Pandas, TensorFlow, PyTorch, Langchain, LlamaIndex
Developer Tools:	Git, Azure, AWS, TCP/IP, Linux, Docker, Jenkins, Kubernetes, Terraform, Ansible, RESTful APIs, Postman

## WORK EXPERIENCE

### Wells Fargo

September 2023 – July 2025

Software Engineer – Finance Technology, Independent Price Verification (IPV) Team

Hyderabad, India

- Led the end-to-end development of the IPV web application, supporting accurate pricing and valuation of financial portfolios worth \$200B, following Agile, SDLC and CI/CD best practices, with sprint tracking in JIRA.
- Designed and delivered production-ready full-stack features using Django (backend APIs), Python (ETL processes), Angular (UI), SQL Server (relational database), Autosys and Liquibase (database schema change management).
- Architected a Python-based ETL pipeline for data ingestion and processing of 20M+ records daily from 130 sources including database extractions, FTP servers, APIs, and file reads.
- Optimized query performance by 66% (10s to 3s) through indexing and archival processes created using stored procedures.
- Automated generation and validation of 50+ commodity control sheets using Python scripts, eliminating 250,000+ manual formula operations and saving 8 hours of effort, resulting in a 99.6% reduction in processing time.
- Awarded the Team Spotlight Award for improving application availability and system reliability by 46%, reducing 100+ recurring yearly production incidents, and enhancing monitoring through automated alerting pipelines.

### MIDAS Lab, IIT Delhi

June 2023 – August 2024

Research Intern

Remote

- Evaluated the reasoning capabilities of 5 Multimodal Large Language Models in the geometry domain.
- Led a team of 3 to build a GEOVQA, a high-quality Indian-context geometry benchmark dataset with 4K images.
- Devised an agentic framework of refinement agents to iteratively reduce reasoning errors in physics tasks, improving accuracy by up to 16% on SciEval and MMLU, for open-source LLMs (LLaMA-3, Gemma-2). [\[Publications\]](#)

### Citi

May 2022 – July 2022

Software Engineering Intern – Treasury and Trade Solutions (TTS) Unit

Pune

- Proposed and migrated the UI of an in-house Process Automation Tool from Thymeleaf to Angular, used for productivity tracking and vendor resource management in the Payments and Receivables unit.

### ISRO COEP Satellite Initiative

January 2020 – March 2022

Individual Contributor – Attitude Determination and Control Subsystem (ADCS)

Pune

- Enabled low-cost, accurate satellite attitude estimation by implementing the TRIAD algorithm and Kalman Filter in C, validated using real satellite data.

## PROJECTS

GenAI-Driven Sustainability Benchmarking Automation Tool | Python, Flask, Streamlit, Microsoft Azure SDKs

March 2024

- Spearheaded the design and deployment of a full-stack web solution on Azure App Service during a company-wide hackathon; led a team of 4 to automate Environmental, Social, and Governance (ESG) pdf report analysis.
- Engineered a RAG pipeline by integrating Azure Form Recognizer for pdf to text extraction, Azure Search Index for context retrieval, and Azure OpenAI (GPT-4) for Q&A on 100+ pages long ESG documents.

User-Threads - Operating Systems | C, Systems Programming, Coroutines, Linux, Bash Scripting

May 2022

- Built a user-level multithreading library in C, supporting 3 mapping models: one-one, many-one, many-many.
- Exposed APIs for thread lifecycle control and management, implemented synchronization primitives like spinlock and signal handlers for over 50+ signals.
- Validated models using race conditions and achieved 80% reduction in execution time for matrix multiplications.

HTTP-Server - Computer Networks | Python, Socket Programming, Networking protocols, MDN Docs

November 2021

- Developed a multithreaded HTTP/1.1-compliant web server in Python following RFC 2616 standards.
- Implemented 5 HTTP methods (GET, POST, PUT, DELETE, HEAD), 15 status codes, 5 media types, multipart form data handling.
- Designed a customizable configuration file for server-side settings with 12+ configurations (e.g., Keep-Alive, timeout).

Paint Application - Object Oriented Programming | C++, OpenGL

April 2021

- Developed using 3 pillars of OOP (inheritance, encapsulation, polymorphism) in C++ with OpenGL for graphics and GLUT for event handling.
- Added 5+ features, including shape drawing algorithms, undo/redo, erase, area filling, border coloring, and brush tools.

## AWARDS AND ACADEMIC ACHIEVEMENTS

- Awarded the Gold Medal for securing Rank 1/780 as Institute and Computer Engineering Branch Topper.
- Received the Best Performer in Mathematics Award for scoring perfect AA grades in all 5 undergraduate mathematics courses.