Jai Pise

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Education

Georgia Institute of Technology - Atlanta, GA   *Expected Graduation: May 2026*
Joint BS, MS in Computer Science (Artificial Intelligence and System Architecture), Minor in Mathematics   **GPA: 4.00/4.00**
Coursework: Operating Systems, Machine Learning, Networking, Artificial Intelligence, Data Structures & Algorithms, Computer Organization, Probability and Statistics, Combinatorics, Discrete Math, Linear Algebra, Multivariable Calculus

Technical Skills

Programming Languages: Python, C/C++, Java, Haskell, JavaScript/TypeScript, SQL, x86 Assembly, PHP, HTML, CSS, Swift
Skills: Spark, Kafka, React.js, PostgreSQL, Express.js, Node.js, MongoDB, Next.js, PineconeDB, Langchain, Google Cloud, Firebase, TailwindCSS, CI/CD, Docker, Android Studio, REST API, GraphQL, Git, Agile, Figma, JUnits, VHDL, gRPC

Professional Experience

Software Engineer Intern | Oracle   *May - Aug 2024*
- Optimized Machine Learning infrastructure by implementing a low-latency, distributed caching system and performance-tuning Spark jobs to maximize end-to-end pipeline throughput with Python, Java, and SQL
- Engineered a multi-threaded Apache Kafka queue system with a transactional outbox to reduce application lags by 27%

Software Engineer Intern | MerchLogix   *May - Aug 2023*
- Streamlined the network communications between 1000+ warehouse merchandisers employed by Fortune 500 retail store clients to organize their space planning by transforming middleware operations from using AJAX to a 35% faster Trie-based API endpoint built with PostgreSQL, JavaScript, and PHP
- Amplified security of in-house libraries and systems with RegEx and Perl for full stack client and server-side input validation

Teaching Assistant - Algorithms | Georgia Institute of Technology   *Jan 2023 - Present*
- Assist in teaching 1000+ students divide-and-conquer algorithms, dynamic programming, graph algorithms, and NP-completeness through weekly office hours and carefully crafting questions for homeworks and exams

Machine Learning Research | National Institute of Technology   *May - Aug 2022*
- Predicted public sentiment toward NASDAQ companies through tweets on Twitter with Natural Language Processing and ARIMA statistical analysis to enhance the reliability of consumer confidence estimates by 67%
- Designed a 93% accurate Machine Learning pipeline with an F1 Score of 0.91 using the Twitter API, web scraping, Data Preprocessing and visualization, Model Training, and Postprocessing

Leadership and Projects

Distributed Log Analyzer
- Developed a scalable and fault-tolerant distributed log analysis system using the MapReduce paradigm in Haskell
- Incorporated Cloud Haskell library to enable efficient processing and analysis of large-scale log files across multiple nodes in a cluster by implementing high-performance parallel array computations and support for lightweight threads

Senior Developer | Bits of Good (chapter of Hack4Impact)   *Aug 2022 - Present*
- Erased redundancies when creating similar projects for different nonprofits by developing a robust microservice-based architecture including an Auth Service, API Gateway, and Database Service, with Docker, gRPC, Typescript, and Nest
- Implemented full-stack, cross-platform mobile app using TypeScript, React Native, MongoDB, and Firebase to accelerate the training of 490+ service dogs for 500+ veterans associated with the Healing4Heroes non-profit

Fountain | HackGT 2023
- Pioneered a website built with React.js and Tailwind to dynamically generate practice problems based on lecture notes
- Minimized loading times with Google Cloud Functions running Python scripts triggered by Firebase events
- Incorporated OpenAI and Langchain with PineconeDB vectors and embeddings to generate more accurate LLM results

Awards and Interests

Faculty Honors, Valedictorian, Scholar-Athlete Award, SAT: 1600/1600

Interests: Poker, Traveling, Basketball, Badminton, Soccer, Trading Club at Georgia Tech