

KINSHUK PHALKE

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Education

Georgia Institute of Technology

August 2024 - December 2025

Masters of Science in Computer Science, Specialization in Machine Learning

Atlanta, Georgia

Georgia Institute of Technology

August 2021 - May 2024

Bachelor of Science in Computer Science, GPA: 4.0

Atlanta, Georgia

- **Concentration:** System and Architecture, Intelligence
- **Clubs:** President dependently-typed (Programming Languages Club)
- **Awards:** GT Intern Student of the Year 2024

Experience

NCR Corporation

May 2024 – August 2024

Software Engineering Intern

Atlanta, Georgia

- Designed a deployable Electron.js testing bench that allows testing on different conditions without physical hardware.
- Integrated with deployed VNC and XServer services allowing headed end-to-end tests to run on production.
- Automated deployment and testing via Feature Flag leading to reduction in time required for testing and setup by 10x.

NCR Corporation

May 2023 – August 2024

Software Engineering Intern Team Lead

Atlanta, Georgia

- Lead a team of 5 interns in designing an end-to-end organization generation micro-service in Python, for SIT testing.
- Designed core logic in catalog generation from dataset, store location randomization and organization provisioning.
- Trained a NER model to recognize brands from products and a transformer model to generate product descriptions.
- Deployed API on Google Kubernetes Engine and designed a CI/CD pipeline to test and publish cluster.

Georgia Tech High Performance Architecture Lab

Jan 2023 – May 2024

Undergraduate Research Assistant

Atlanta, Georgia

- Developing hybrid SSD-GPU architectures and scheduling strategies to maximize bandwidth and performance in GPUs.
- Developed an SSD Scheduling Algorithm that led to around a percentage increase in throughput and IOPS in comparison with existing algorithms.
- Published Thesis: *Maximizing SSD Bandwidth Efficiency Through In-Storage GPU Integration.*

NCR Corporation

May 2022 – August 2022

Software Engineer Intern

Atlanta, Georgia

- Developed a shopping cart micro service in Go Fiber deployed onto GCP to enable carting on PoS devices and websites.
- Designed core logic in CRUD operations of cart and service integration into NCR's BSP layer for related taxes, prices, store locations, promotions, returns and item attributes information and operations.
- Architected a CI/CD pipeline to run testing suite, verify and publish deployments, publish artifacts onto GCP.
- Automated management of environment in production, Kubernetes cluster, pods, deployment and CA certificates.

Notitia

November 2021 – December 2022

Software Engineer

Atlanta, Georgia

- Built a LDA model in Python for Topic Discovery capable of ingesting 50K tokens, tuned UMAP parameters to achieve a 80% accuracy in dimensionality reduction, utilized FAISS in clustering, designed WordCloud UI using React Flow.
- Optimized the frontend graph rendering by 60% and backend machine learning algorithm by 40%.

Projects

DeusCL

Rust, Common Lisp, Yew Framework

- Developed a memory-safe REPL in Rust using a handwritten recursive descent parser and a visitor pattern evaluator.
- Implemented basic type inference, type checking, error handling system, lexically scoped garbage collector and a dynamic evaluation of functional environment and parameters.
- Designed a frontend in Yew Framework in Rust to enable users to use a web based simulation of REPL.

Publixmon

MongoDB, Express.JS, React Native, Node.JS, Flask, Node.js

- Developed a Web3 mobile app in React Native allowing users to play NFT trading game to boost retail engagement.
- Integrated with the NCR BSP layer for order, catalog, inventory details and generate an NFT based on user history.
- Tested mining NFTs on the Ganache Blockchain via a node.js server to facilitate Smart Contracts from the App.
- Project won the first place at the NCR API Challenge at HackGT 8.

Technical Skills

Languages: Python, Rust, Go, JavaScript, Java, C, C++, C#, TypeScript, Solidity, Bash

Frameworks: ReactJS, Next.JS, NestJS, Astro, Express.js, Node.js, Flutter, React Native, Redux, Web3.js, Yew, Tauri

Machine Learning: Tensorflow, PyTorch, NumPy, Scikit-learn, Matplotlib, Pandas, Keras, NLTK

Technologies: Git, Linux, Docker, Postman, L^AT_EX, MongoDB, Redis, Kubernetes, GCP, AWS