

Kinshuk Phalke

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EDUCATION

GEORGIA INSTITUTE OF TECHNOLOGY

BACHELORS OF SCIENCE IN COMPUTER SCIENCE

Coursework: Data Structure and Algorithms, Honors Discrete Math

Clubs: Executive Board - dependently-typed, GreyHat

Atlanta, GA | Aug 2021 - May 2024

GPA: 4.0

WORK EXPERIENCE

NCR CORPORATION | SOFTWARE ENGINEERING INTERN

Atlanta, GA | May 2022 - Aug 2022

- Worked in the Retail innovation team in building a micro-service in Go to enable Cart service enabling shopping, checkout, transactions, taxes and payments.
- Worked on making API endpoints, integrating with other APIs to do other tasks like tax and get price details of an item.
- Worked on modelling data and made a CI/CD pipeline that performs a series of checks and publishes the Kubernetes Cluster onto Google Cloud Platform.
- Made a Bash Script with 12 presets to help change environment variables for different stages in production, enabled simple deployments, creating and updating internal CA Certificates and managing kubectl pods and deployments.

NOTITIA | SOFTWARE ENGINEER

Atlanta, GA | Nov 2021 -

- Working as full stack engineer in building a MVP for a startup at Georgia Tech.
- Built a LDA model in Python and worked with tuning UMAP parameters and implemented a clustering algorithm using FAISS. Worked on UI of a WordCloud using React Flow.
- Optimized the front-end by 60% and back-end by 40%.

PROJECTS

SPEECHTOCODE

PYTHON, REACTJS, NODE.JS

Built a meta language parser that enables you to speak in a language close to English and creates a class based abstraction based on it, which is then easily translated to the language selected. Worked on designing the frontend and connecting the parser to the frontend using a flask server.

DEUSCL

RUST, COMMON LISP, YEW FRAMEWORK

A memory-safe REPL built in Rust. Built a handwritten recursive descent parser and a visitor pattern dependent evaluator. Added a basic type inference, type checking and error handling system. Added dynamic evaluation of functional environment and parameters. Wrote a simple garbage collector and environment cleaner. Building 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

Publixmon is an app to boost retail engagement. Built a smart contract allowing users to mint NFTs based on Order History of each user. Integrated with the NCR BSP layer to pull order details, catalog and inventory details. Built and tested mining NFTs on the Ganache Blockchain and built a node.js server to facilitate blockchain actions. Project Won the First Place at the NCR API Challenge at HackGT 8.

MENTAL HEALTH CHAT

REDIS, DOCKER, MONGODB, EXPRESS.JS, REACTJS, NODE.JS, SOCKET.IO

A timed chat for users to talk about mental health issues. Built a login platform using firebase and OAuth, utilized redis cache in order to create cache to store the messages for 6 hours before deletion, served requests through a REST Node.js server, utilized Socket.IO to create pubsub connections between clients and utilized Redux as a centralized theme store per user.

HACK-A-LANG

PYTHON

Worked with a team of 3 for the "hack-a-lang" event, to make the python implementation of the Lox Learning Language, complete with an implementation of dynamic functional environments, type checking, error handling, recursive descent parser and a visitor pattern dependent evaluator. Also, spoke at the event about the evaluator, visitor patterns, environment creation and variable handling. Also, created exercise for the participants to work on to increase their knowledge.

ENHANCE

PYTHON, TENSORFLOW, KERAS

Created a Res-Net Implementation of the Super Resolution GAN Paper (<https://arxiv.org/pdf/1609.04802.pdf>) for Single Image Super Resolution. I worked with tensorflow in creating a Residual Blocks and Skip Connections and used the VGG-19 Model to calculate the Content Loss of the Model. The model achieved perceptible improvements in image quality on the DIV2K dataset with a downscale factor 4.

SKILLS

Languages:

Python, Rust, Go, JavaScript, Java, C, C++, C#, , Solidity

Full-Stack:

ReactJS, Express.js, Node.js, Flutter, Ionic, React Native, Socket.IO, Redux, Web3.js, Yew, Tauri

Machine Learning:

NumPy, Scikit-learn, Open AI Gym, Matplotlib, Pandas, Keras

Technologies:

Git, Docker, Postman, \LaTeX , SQL, MongoDB, Redis, Kubernetes
