Kailash Muthu

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EDUCATION

University of North Carolina at Chapel Hill
Bachelor of Science in Computer Science

Chapel Hill, NC

Aug. 2020 – May 2023

- GPA: 3.92 | Honors Carolina | Dean's List
- Relevant Coursework: Analysis of Data Structures, Algorithms and Analysis, Modern Web Programming, Foundations of Software Engineering, Digital Logic and Computer Design (Learning Asst.), Computational Photography, Machine Learning

TECHNICAL SKILLS

Languages: Python 3, Javascript, Java, C, HTML/CSS
Frameworks and Tools: Node.js, React.js, Git, Express, Mongoose MongoDB, Flask, Django, Heroku, Matlab, IMB Z

EXPERIENCE

CareYaya Health and Technologies
Software Engineer Intern

Jan 2023 – Present

Durham, NC

- Co-developing a real-time chat feature in a high-paced start-up environment for the CareYaya app, utilizing TypeScript, RemixJs, TalkJS, and pocketbase.io to improve communication between caregivers and customers.

Truist Financial
Software Engineer - Part Time, Mergers and Acquisitions

Dec. 2022 – Present

Raleigh, NC

- Work with Azure and Azure DevOps, and contribute to continuous integration and delivery pipelines
- Design and implement infrastructure as code solutions using Terraform for the automation of resource provisioning, configuration management, and deployment processes.
- Refactor applications to be Cloud Native

University of North Carolina at Chapel Hill
Learning Assistant

Aug 2022 – Present

Chapel Hill, NC

- Assist teaching COMP 541 - Digital Logic and Computer Design to a class of over 40 students
- Lead 10+ hours of weekly office hours and review sessions, providing individualized support to improve understanding of course material
- Teach students to design a MIPS CPU in System Verilog and run a program in MIPS Assembly

PROJECTS

BriefURL | Personal Project | *Node.js, Express.js, Mongoose, MongoDB*

Winter 2022

- Developed a URL Shortener application using Node.js and Express.js, handling all routing and implementing a scalable URL shortening system
- Used MongoDB and Mongoose to store and manage data for the application
- Generated unique, 6-character identifiers (UUIDs) using a 62-character bank, to designate the shortened URL

Sort Algorithm Visualizer | Personal Project | *React.js, Javascript*

Fall 2022

- Created a React application that visualizes the step-by-step process of sort algorithms
- Visualized 4 different sort algorithms: Merge Sort, Quick Sort, Heap Sort, and Bubble Sort

Thirukkural Finder | Personal Project | *Flask, Python*

Fall 2021

- Developed a Flask application that generates over 1300+ poetic couplets called Kurals written by the Tamil poet Thiruvalluvar
- Built a Python script that accesses an API containing Kurals and returns the Kural based on an input number provided through textbox or voice recognition

Amazon Web Scrapper | Personal Project | *Flask, Python*

Spring 2021

- Developed an Amazon.com Scraper application that returns the top search results through a Discord bot, using Python and web scraping techniques with the BeautifulSoup package
- Designed a parsing algorithm to extract relevant product information from Amazon.com's front-end code, including the product title, price, image, ratings, number of ratings, and link to the product