

VISHNU RAJ CHERUKUDI MATTUVAYIL

SOFTWARE ENGINEER

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EDUCATION

M.Sc. Research in Computer and Systems Engineering

2022 - PRESENT

Technical University of Ilmenau (TUI)

GPA: 2.5

B.Tech in Computer Science and Engineering

2015 - 2019

A P J Abdul Kalam Technological University

GPA: 2.8

WORK EXPERIENCE

THYOTEC | IKS SERVICE GmbH

2022 - 2024

Technical Assistant

- Defined essential requirements and specifications for project.
- Developed a portal website for Single-Sign-On(SSO) use case.
- Implemented and integrated SSO for website with outlook using on-premise ADFS and Exchange Server.

TECHNICAL UNIVERSITY OF ILMENAU

2023 - 2024

Research Assistant

- Implementation of database schema for the network management system of 5G and the big data analysis.
- Real-time sync of data in Python Plotly Dash from MongoDB.
- Implementation of data retention policies.
- Parsing of network data for performance measurement in Go-lang.

ZERONE-CONSULTING PVT. LTD.

2021 - 2022

Software Engineer - L3

- Optimized existing data transfer programs written in C#.
- Designed tables, written optimized SQL queries, and implemented indexing strategies to enhance database performances.
- Managed version control for 15+ projects using Git and TFS, and deployed them to Azure Cloud.
- Developed procedures to archive 20+ outdated projects, freeing up space for existing databases.

Software Engineer - L2

- Developed back-end programs for data flow into new projects from existing ones.
- Designed a program to encrypt and decrypt configuration files for security.
- Automated the import and export of health related data using SQL Server Integration Services.
- Automated the import of Open Payments Data using Socrata Open Data API.

ZERONE-CONSULTING PVT. LTD.

2019 - 2020

Software Engineer - L1

- Trained in C#, ASP.NET, SQL Server, JavaScript, JQuery, PHP, MySQL.
- Developed and maintained website related to medical invoice reports with ASP.NET, C# Scripts, SQL Server, SSRS,
- JavaScript, HTML, CSS, ABBYY.
- Generated reports with SQL Server and SQL Server Reporting Services.
- Scaling servers and usage of load balancer with AWS.

PROJECTS

- **In-Browser Raster Data Processing**

- Developed a tool to process and visualize raster data directly in the browser using WebAssembly for enhanced performance and real-time interaction.

- **Hybrid ML Model to Detect Energy Theft**

- Implemented a hybrid model combining Convolutional Neural Networks (CNN) and Multi-Layer Perceptrons (MLP) to detect energy theft with improved precision.

- **Sleep Detection for Drivers**

- Implemented an application to detect microsleep using facial recognition with OpenCV and a CNN model, enhancing road safety by identifying early signs of driver fatigue.

SKILLS

- Programming Languages - C#, Python, JavaScript, Go, PHP, C, C++
- Web Development - HTML5, CSS3, Javascript, Bootstrap, jQuery
- Databases - Design, Query Optimization, Indexing, MS SQL Server, MongoDB
- Cloud and DevOps - Azure, GCP, Docker, Git, CI/CD, MinIO, Active Directory
- Frameworks and Libraries - ASP.NET, TensorFlow, ReactJS, NodeJS, ExpressJS

LANGUAGES

- English - C1
- German - B1
- Malayalam - Native