# Krishna Deep Yerramallu

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#### Education

# Stevens Institute Of Technology

Masters of Sciences in Computer Science

New Jersey, USA Aug. 2024 - Present

# Experience

# Data Engineer / Business Analyst

August 2022 – August 2024

Silicon Labs

Hyderabad, Telangana

- Crafted a diverse set of Python and Go scripts to facilitate data collection through Robotic Process Automation (RPA) and streamline data orchestration processes reducing human intervention by more than 75%.
- Created SQL scripts and integrated advanced design patterns to optimize data processing, data movement and data retrieval, resulting in a significant reduction in egress costs by 39% from 2023 to 2024.
- As part of a comprehensive cloud migration project, successfully transitioned legacy applications, data sources, and reports from their original on-premises environments to the cloud.
- Collaborated closely with multiple departments to pinpoint essential key performance indicators (KPIs) and craft visualization dashboards, empowering teams to efficiently track and manage their performance.
- Contributed in data warehousing efforts by overseeing the collection, storage, and efficient retrieval of data while maintaining a strong focus on data accuracy and reliability.
- Developed business intelligence solutions, encompassing dynamic dashboards and comprehensive reports, by leveraging tools like Tableau and Power BI.

# Undergraduate Research Intern

January 2020 – January 2022

Keshav Memorial Institute Of Technology

Hyderabad, Telangana

- Played a significant role in early-stage breast cancer detection, utilizing machine learning and deep learning. This includes developing APIs for estrogen receptor detection, implementing deep learning for tubule segmentation on large whole-slide images as part of the Allred Scoring system, and contributing to related research papers.
- Incorporated storage and computing clusters into an AI infrastructure framework using Docker-Swarm, HistomicksTK.

# **Publications**

• Nottingham Grading in Breast Cancer on Whole Slide Images (WSI) with Deep Learning (Scopous, Under Review).

#### Technical Skills

Languages: Java, Python, C/C++, Go, Scala, SQL Cloud Technologies: Azure, Azure Data Factory, AWS Visualizations Technologies: Tableau, PowerBI Operating Systems: Linux, MacOS, Windows

Hardware Technologies: Raspberry Pi, Arduino, ArduPilot, Jetson, Microsoft Kinect360

# Projects

Data Warehousing and Data Engineering | Azure, PowerShell, Python, Tableau, Power Bl August 2022 - July 2024

- The primary objective of this project is to design, implement, and manage a data warehousing solution in Azure to store and analyze the organization's data. Additionally, it involves migrating existing data from on-premises or other cloud platforms to Azure Data Warehouse.
- Designed the database and sophisticated design patterns for the Azure Data Warehouse, including tables, views, indexes, stored procedures. Optimized data storage and query performance. Used JAMS Scheduler and python in coordination for analytics and orchestration.

SPYder - Hexapod Robot | Python, Arduino, Raspberry Pi, Deep Learning, Object Detection

February 2020

- An arachnid-inspired 8-legged robot designed for navigating tight and confined spaces with agility and adaptability.
- The robot can ascend to heights of 10 centimeters with precision, detect obstacles during its ascent, and adjust its path accordingly. Contributed in Object detection, Obstacle avoidance, 8 legs coordination code. Reference.

# Leadership / Extracurricular

# Recurse - The Technical Club

September 2020 - July 2022

Head of the Club

Keshav Memorial Institute Of Technology

- Conducted a wide range of events, including workshops, hackathons, alumni lectures, and national-level coding competitions, to provide participants with a holistic exposure to the corporate world.
- Worked on Kinect360, DJI Drone, Ardupilot Drone, Raspberry Pi, Arduino, Humanoid Robot as a club.