K A V PUNEETH SARMA

College Park, MD
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EDUCATION

University of Maryland College Park, MD
Master of Engineering in Software Engineering, GPA: 3.8 **Expected** May 2025
Relevant courses: Data Analytics, Fundamentals of AI and Deep Learning, Software Engineering, Software Requirements, Software Testing, Cloud Security

International Institute of Information Technology Bangalore Bangalore, India
Integrated Master of Technology in Computer Science, GPA: 3.25 July 2021
Relevant courses: Machine Learning, Visual Recognition, Advanced Visual Recognition

SKILLS

Programming Languages: C++, Java, Python
Web Development: HTML/CSS, Embedded Javascript(EJS), Typescript, Angular, Flask, Springboot
Database: MySQL, InfluxDB, Neo4j
Machine Learning/Deep Learning: Numpy, Pandas, Matplotlib, Scikit-Learn, Jupyter, Pytorch
Tools/Technologies: Linux, Git, GitHub, Docker, Docker Compose, Kubernetes, Bash, SSH, AWS

EXPERIENCE

Infosys Bangalore, India
Specialist Programmer - Expert Track July 2021 – August 2023
Client: *Statefarm*

- Took a lead role in ensuring the smooth operation and reliability of the Rasa-based Natural Language Understanding (NLU) service through proactive maintenance and support efforts.
- Engineered solutions that resulted in a 25% reduction in issue resolution time, showcasing dedication to client satisfaction and service excellence.
- Pioneered research on Graph Neural Networks, leading to the development of a cutting-edge PyTorch-driven link prediction service.
- Optimized NLU service performance through the implementation of advanced features, enhancing the processing of complex sentences using Spacy and NLTK.
- Innovated automated regression testing using Protractor, bolstering application robustness and saving 20 hours of testing time per release cycle.

Siemens Technology Bangalore, India
Research Intern December 2020 – June 2021

- Spearheaded a project focused on assessing the efficiency and efficacy of InfluxDB, for storing and retrieving ROS data.
- Implemented a streamlined pipeline to process sensor data and seamlessly push it into the database.
- Conducted comprehensive testing by ingesting 100GB of ROS data and orchestrating experiments to evaluate performance metrics.
- Leveraged project outcomes to inform strategic decisions regarding the optimal approach for future storage and retrieval of ROS data.

PROJECTS

License plate recognition and speed estimation system January 2020 – May 2020

- Contributed to a deep learning application for Bharat Electronics Limited (BEL).
- Explored and incorporated diverse deep learning models to establish a pipeline for identifying license plates, extracting characters and determining vehicle speed in CCTV videos for Bharat Electronics Limited (BEL).
- Employed pre-trained and customized models strategically to optimize the solution.

Road Boundary Detection using Semantic Segmentation August 2019 – January 2020

- Implemented a road boundary detection model utilizing Semantic segmentation.
- Modified SEGNET, a multiclass segmentation model, to tackle the the binary classification challenge.
- Conducted training on Kitti dataset and tested on Cityscapes dataset to address the limitation of small data size and assess generalizability.
- Achieved a training accuracy of 77% and testing accuracy of 66%.

PUBLICATIONS

Automatic prediction of presentation style and student engagement from videos
Chinchu Thomas, K.A.V. Puneeth Sarma, Srujan Swaroop Gajula, Dinesh Babu Jayagopi