DEEPAK RAMANI¹

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SUMMARY

Highly motivated software engineer with a passion for data engineering, DevOps, and machine learning. Experienced in developing and deploying scalable and reliable software systems. Proven ability to work independently and as part of a team to solve complex problems. Seeking a challenging opportunity in Germany where I can use my skills and experience to make a positive impact.

EDUCATION

RWTH Aachen University, Aachen, Germany

2011 - 2020

M. Sc. Communication Engineering, GPA: 2.1 / 5.0 (1.0 = excellent)

SASTRA University, Tanjore, India

2005 - 2009

B. Tech. Electronics and Communication Engineering, GPA: 8.3 / 10.0

EXPERIENCE

Master Thesis, RWTH Aachen University - Aachen, Germany

Apr - Sep 2020

- Implemented an end-to-end autonomous driving system using a simpler CNN model architecture.
- Collected and processed over 500k multi-modal sensor data using the LGSVL simulator and ROS, ensuring high-quality input for the system.
- Analysed and preprocessed data using Python, Numpy, and OpenCV libraries, reducing memory consumption by 65% and model training time using Keras / Tensorflow by at least 30%.
- Successfully demonstrated the effectiveness of fusing techniques for night-time driving and collision avoidance within the implemented system. Read more about the project on Github.

Full Stack Engineer, Part-time - local supermarket - Aachen, Germany

2018 - 2019

- Designed, developed and maintained an efficient inventory management system using Python, Flask, sqlite3, HTML and CSS.
- Created a straightforward UI for simplified, faster, more accurate data entry. Automated report generation saving valuable time.
- Minimised bookkeeping workload by an impressive 65% while ensuring seamless succession planning through comprehensive documentation.

Assistant, Part-time - Various - Aachen, Germany

2016 - 2017

- Supported professors by setting up and recording lectures, editing them using Adobe Premiere, and uploading them to the student hub, ensuring smooth access to educational materials.
- Maintained accurate records of financial transactions for a dormitory in Studierendenwerk Aachen, utilising MS Excel and Python to efficiently manage bookkeeping activities.

Software Developer Intern, Ericsson GmbH – Herzogenrath, Germany

2013 - 2014

- Contributed to the automation framework, saving regression testing time by more than 30% on each run. Built with Java, SQL, and TestNg / JUnit.
- Enhanced Cloud Infrastructure team's system health check library by 10%.

Systems Engineer, Infosys Technologies Limited - Chennai, India

2009 - 2011

- Supported business applications necessary for inter-bank payment systems catering to high net-worth clients for Royal Bank of Scotland.
- Monitored alerts and collaborated with multidisciplinary teams to ensure minimal impact on services.
- Rated highly for team performance and client service, with a score of 6/7 on performance rating.

¹Blog - https://dr563105.github.io/

PERSONAL PROJECTS

Sales Forecasting Application | Python, AWS, Prefect, MLFlow, Docker

- Implemented a ML pipeline to simulate production environment.
- Sourced, preprocessed sales data from Kaggle using Pandas.
- Orchestrated and tracked ML model training(LGBM) with Prefect and MLflow.
- Automated batch deployment of the best model using AWS services such as API Gateway, Lambda(serverless) and ECR. Managed infrastructure with Terraform.
- Streamlit deployment of the app. Check out the code on on Github.

PERSONAL SKILLS

Languages: English(fluent), German(B2,1 - working proficiency)

Social Skills: Team player, hard and efficient worker, versatile, independent and integrate well with people

across different cultures

Hobbies: Reading books, gardening, blogging, cooking