ABHISHEK KUMAR REDDY GOTIKE

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Objective

Summer internship in the field of software engineering.

Education

Worcester Polytechnic Institute, Worcester, MA
- Master of Science (MS), Computer Science, CGPA: 3.66/4.0 Expected: May 2023

Manipal Institute of Technology, Manipal, India
- Bachelor of Technology, Electronics and Communication Engineering, CGPA: 8.58/10 July 2017

Relevant Coursework:
- Design of Software Systems, Algorithms: Design and Analysis, Natural Language Processing

Technical Skills

Programming: Python, Java
Software & Tools: MATLAB, Git, AWS-Lambda, S3, RDS, NumPy, Pandas, Scikit-learn

Projects

Triangle Puzzle – Individual project
- Developed a puzzle in Java based on Model view controller design paradigm.
- Achieved a code coverage of 96.3%.

Algorithm Management System – four-member group project
- Developed a collaborative web application where people can share their research with their peers along with several other parameters in a hierarchical organization hosted on AWS.
- My role – Developed the backend side of the code in Java based on model view controller design paradigm.
- Achieved a code coverage of 78%.
- AWS services used – Lambda, S3, RDS, API Gateway.

Title generation for news articles – four-member group project
- From the dataset, articles and respective keywords were utilized to generate an abstractive summarization of the news article.
- My role – Training and validation of LSTM and LSTM with pointer generator network using python.
- BART and T5 outperformed the LSTM models which served as the baseline.
- Evaluation models used – Rouge, BertScore & BLEURT.

Experience

Mercedes-Benz Research and Development, India & Germany July 2017 – May 2021
Embedded Software Validation Engineer – Automated Driving
- Developed a computational framework in Python that considered the behavior of static and dynamic models to test automated driving features in the simulation.
- Researched about the country specific model designs and constraints which also involved discussions with various stakeholders that resulted in a robust framework.
- Developed robust test automation for collision avoidance systems using TPT (based on Python) which actively supported the SW development by generating quick evaluations.
- Studied the validation tool chain specifications and implemented a POC using Python to automate the tool chain.

Indian Institute of Technology, Hyderabad January 2017 – June 2017
Research Internship
- Conducted a study of blind source separation algorithms – Independent Component Analysis (ICA), Single Channel ICA (SCICA).
- Performed data analysis of SCICA algorithm by varying the sampling frequency and delay matrix dimension to understand the impact on the similarity of reconstructed output using MATLAB.

- Researched existing literature and proposed a hardware efficient system architecture to compute covariance of 128*256 data using 8 multipliers.

Awards

Mercedes-Benz Research and Development

- Awarded Bronze Star for displaying one of organization's core principles – Agility.
- Xtreme Award – Recognized at the organization level for my willingness to support other business units within Daimler during the COVID-19 pandemic.

Extra-Curricular Activities

Leadership

- Event Head for a technical event as part of technical fest where a group of 20 participants were taught to build a basic antenna and use it in the event.

Volunteer Experience

- Part of a technical student club IE E&C whose activities involved conducting workshops, seminars, and small-scale events.