Sri Preethi Puchakayala

EDUCATION

National Institute of Technology Karnataka

B. Tech, Electronics & Communication Engineering, CGPA 8.15, AIR 4236

Sri Vani Junior College, Sathupalli

Intermediate Board of Telangana, Percentage 97.7%

Dr.KKR's Gowtham Concept School

Central Board of Secondary Education, CGPA 10

Surathkal, Karnataka Aug. 2017 – Apr. 2021 Khammam, Telangana Jul. 2015 – Apr. 2017 Gudivada, Andhra Pradesh Jul. 2014 – Apr. 2015

WORK EXPERIENCE

Engineer, Target Corporation

Aug. 2021 – Present

- Developed and maintained scalable, high-performance RESTful APIs to support web applications.
- Worked on several other tools and frameworks like Springboot, Kafka, Elasticsearch, PostgreSQL, JUnit testing.
- Designed architectures for pipelines that brought good impact to the performace of the team.
- Led and worked on tech migrations for the team like Java8 to Java17/21, Springboot1 to Springboot3, upgrading to java clients like RestClient, ElasticsearchClient, KafkaTemplate, etc eliminating plenty of boilerplate code.
- Integrated different tools and practices into the team for efficiency like gradle catalogs, spotless, etc.
- Automated lot of workflows by building required python scripts, and using appropriate tools like Airflow, etc.
- Mentored a couple of TMs helping them understand different technologies and pipelines in the team.
- Actively participated in hackathons and tech tournaments.

Assistant Engineer, Samsung Semiconductors (SSIR)

May. 2020 – Jun. 2020

- Worked on enabling the Neural Networks that deal with sequential data like RNNs and LSTMs using Open Source Compilers like TVM (Tensor Virtual Machine) under the NPU Compiler Team of the company.
- Learnt different compiler optimization techniques in the process.

Research Trainee, Defense Research & Development Organisation (DRDO)

May. 2019 – Jun. 2019

- Worked on 'Target Detection in Sea Clutter' which detects the target (opponent missile) in sea clutter using Neural Networks, trained with RBF and GA algorithms.
- The project was under the Electronics and Radar Development Establishment (LRDE), DRDO.

Mentee, Microsoft

Jun. 2019 – Jul. 2019

• Got into the Codess Mentorship programme by Microsoft where I've had the opportunity to learn about DSA, standard coding practices and working with different technologies.

OTHER PROJECTS

Target Security Exploit + Win Tournament

Target Corporation

- Took part in a gamified security hacking tournament conducted at organisation level in Target.
- The tournament provides with a vulnerable site with different kinds of security threats where we gain points for identifying and exploiting them.

TWINE Hackathon

Target Corporation

- Participated in an open hackathon for women in tech at Target.
- Created an UI called interview-o-pedia which streamlines the end-to-end candidate hiring process for employers, offering advanced planning and scheduling capabilities, along with a video conferencing feature reminiscent of Zoom.

Segmentation of Tumour from Brain MRI Sequences

NITK, Surathkal

- Developed automated semantic segmentation of 3D MRI Sequences into Active tumour, Tumour core & Whole tumour with 96.8% accuracy using .a customised 3D U-net architecture and encoding-decoding pathways for feature extraction and localisation.
- Trained and tested the model with medical data from Manipal Hospitals, Manipal.

Sign to Speech Conversion

Institution of Engineers (IE), NITK

 Worked on the project of converting hand gestures to verbal signals using image processing techniques in python, helping speech-impaired and visually impaired people.

SKILLS

Languages: Java, Python, C, C++, Shell Script, Kotlin

Tools & Frameworks: Springboot, Gradle, Kafka, ELK Stack, PostgreSQL, Grafana, Docker

Other Skills/Technologies: Data Structures & Algorithms, Version Control, CI/CD, security coding practices, code & performance optimisation techniques, comprehensive documentations, thorough code reviews.