GAUTAM VR

Digital Portfolio : [gautamvr.github.io]

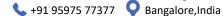✉ gautamvr55@gmail.com 📞 +91 95975 77377 📍 Bangalore,India in linkedin.com/in/gautam-vr ⭘ github.com/gautamvr

SUMMARY

- Proactive Software Engineer with 4.5+ years of professional experience in technology driven organizations following AGILE process of software development life cycle using CI/CD pipelines, AI model engineering with code metrics, git practices and exposure in system design and architecture.
- AWS Cloud Certified Associate Developer with strong hands-on experience in developing and deploying scalable cloud-based systems in AWS & GCP.
- TensorFlow certified Machine Learning practitioner with demonstrated knowledge by building various AI models and by relevant research experience.

WORK EXPERIENCE

Software Engineer-2 | Intuit Inc. *– Bangalore*　　　　　　　　　　　　　　　　　　　　　　　　　　　*Oct 2022 – Present*

- Working in core development of ProSeries TY22 & TY23, Professional Tax software products for US which has revenue over 170 million USD.
- Successfully released 11+ releases for the product, having 50k+ customers in US, using Jenkins and analysed various data in Splunk dashboards.
- Incorporated Intuit Assist (GenAI platform) into ProSeries TY23, using paved path services to reduce 60% of preparation time for tax preparers.

Software Engineer-2 | Philips Healthcare *– Bangalore*　　　　　　　　　　　　　　　　　　　　　*Sept 2021 – Oct 2022*

- Parallely worked in 3 key programs in MR Imaging modality, also in Advanced Development of CT workflow in Image Acquisition Platform team.
- Delivered 8+ features for MR Artes release & Service pack release with maintainable and testable code using appropriate design patterns.
- Developed and owned 4 major components of MRI console system with end-to-end documentation of design, tests & requirements.

Software Engineer-1 | Philips Healthcare *– Bangalore*　　　　　　　　　　　　　　　　　　　　　*June 2019 – Sept 2021*

- Implemented 6 features while adhering to SOLID principles in C# .NET using BDD (SpecFlow) and ensuring code quality score (TICS) > 95%.
- Developed 3 major Change Requests to address critical customer feedback with high priority, and fixed 18+ product defects in MR R10 release.

Data Analytics Intern | Nokia Solutions and Networks *– Chennai*　　　　　　　　　　　　　　　*May 2018 – June 2018*

- Worked for product engineering with data analytics & Machine learning and reduced 72% of the defective modules in production line.

Embedded Engineer | Technocrats Robotics *– VIT University's Official Robotics Team*　　　　*Apr 2016 – May 2018*

- Built 2 autonomous and 4 manual robots coordinating across interdisciplinary teams for International Robotics competitions, ABU ROBOCON.
- Comprehensive research in the field of Computer Engineering to build functional robots with high accuracy using ML – Logistic Regression & SVM.

EDUCATION

VIT University | Vellore Institute of Technology *– Chennai*　　　　　　　*June 2015 – May 2019*

Bachelor of Technology in Electronics and Communications Engineering *(CGPA: 7.83/10)*

- **Relevant Courses:** *Digital Image Processing, Neural Networks, Object Oriented Programming, Network Security, Embedded System Design, Calculus, Applied Linear Algebra, Probability theory, Statistics.*
- **Robotics Club**: Actively *involved in end-to-end development of robots using ML, Microcontrollers. (3 years)*

TEST SCORES

- **GRE – 316/330** (Q:163, V:153, AWA: 4)
- **TOEFL iBT – 108/120** (R:30, L:28, S:23, W:27)
- **AWS Developer Certification –** 880/1000
- **Higher Secondary Education (CBSE) –** 94.4%

PUBLICATION |IEEE Paper|　　　　　　　　　　　　　　　　　　　　　　　　　　　*Published: May 2020*

IEEE citation - S. Kowshik, V. R. Gautam and K. Suganthi, "Assistance For Visually Impaired Using Finger-Tip Text Reader Using Machine Learning" 2019 11th International Conference on Advanced Computing (ICoAC), 2019.

- Text segmentation (**Fully Convolutional Network + NMS**) -> Text recognition (**Tesseract OCR**) -> **Text to Speech Conversion**

KEY PROJECTS |GitHub|

- **AWS Web Application –** A multi-tier cloud-based web application with JWT authenticated REST API endpoints using node.js, hosted on EC2 in a custom VPC under ALB with autoscaling, along with RDS, S3, SES, Lambda & SNS. The whole stack is created using CloudFormation (IaC) for reusability.
- **SpaceX Landing Analysis –** An end-to-end Data science project in IBM Cloud with Data collection and ETL using BeautifulSoup, EDA with SQL & plotly, Interactive visual analysis using Dash & Folium, and Predictive analysis using ML models with GridSearchCV to find the optimal hyper-parameters.
- **Tumour Segmentation –** Medical image segmentation using PyTorch, OpenCV to identify tumour in medical images with Computer Vison.
- **Serverless Music App –** An AWS serverless app to stream music created using AWS CDK in python with API Gateway, Kinesis Streams, S3 & Lambda.
- **Document Analyzer –** An AI pipeline with GCP, AutoML models to extract the key data from documents and to store in BigQuery for further analysis.
- **SkimLit –** An AI model which skims a research paper & provides a detailed summary. Used NLP with analysis of RNN (GRU, LSTM) & Conv1D models.
- **FoodVision -** Computer Vision model to identify the food using CNN (EfficientNetB0), trained with dataset of 10100 images by fine tuning the model.
- **Chatbot for Healthcare–** Interactive chatbot using C# with MS SQL database and WCF, integrated with CI pipeline – quality gates, build and run tests.

PROFESSIONAL CERTIFICATIONS |Digital Badges|

- **AWS Certified Developer – Associate Certification** by AWS *[April 2022]*
- **TensorFlow Developer Certification** by TensorFlow *[Feb 2022]*
- **IBM Data Science Professional Certificate (V2)** by IBM *[Nov 2021]*
- **Specialization in Deep learning** by deeplearning.ai *(+ honours)* *[2018]*
- **Machine Learning** by NPTEL, IIT Kharagpur *(elite certification)* *[2017]*

TECHNICAL SKILLS

- **Languages**　Python, C#, C++, SQL, Java, JavaScript
- **Frameworks**　**.**NET, SpringBoot, TensorFlow, WPF, PyTorch, OpenCV, WCF, node.js, Keras, pandas, scikit Learn, D3
- **Databases**　MSSQL, MongoDB, Dynamo DB
- **Platforms**　AWS, GCP, Azure, Linux, Windows

ACHIEVEMENTS

- **Winner** of 2021 IAP Hackathon, Philips – "Smart MRI console"
  - *Anomaly detection and segmentation* using deep learning.
- **Winner** of 24-Hour IoT Make-athon, 2018 with the theme –
  - Inventory management using **IoT, Deep learning and OpenCV**.
- Received **Super Star award & 3 quarterly awards** – (Philips and Intuit)
  - *Taking ownership**,** being Team player,* delivering *first time right.*
- Represented VIT university in *International Robotics Competition.*

LEADERSHIP AND CO-CURRICULAR EXPERIENCE

- Core leader in *Young Leaders Club*, Philips – Representing as a mentor in Reverse mentoring program & managing internal initiatives.**[2021-22]**
- *Department Head* in Technocrats Robotics team, VIT.　**[2017-18]**
- *Student Organizer* of International Conference, ICNETS[2]　**[2017]**
- **Overall Student Coordinator** of 24-Hour IoT Make-athon, VIT.　**[2017]**
- Part of the Student Chapter in **IEEE Signal Processing Society. [2018-19]**
- Active member in **Toastmasters** club, for speaking and leadership skills.