PRAGATHI KANALA

Email: pragathi258@gmail.com || **Mobile:**+1(762)(699)(4762)|| **LinkedIn:** http://linkedin.com/in/k-pragathi258/

EDUCATION

Master of Science in Computer Science: ***3.55/4.0 GPA****(Current), May 2025*
Florida Institute of Technology, Melbourne, Florida, United States
Relevant Coursework: Computer Information Security, Database Management, Computer Vision, Artificial Intelligence

Bachelor of Engineering in Electronics & Communication: ***7.8/10 CGPA,*** *August 2021 (Awarded Distinction)*
PES Institute of Technology, Bangalore, Karnataka, India
Relevant Coursework: Programming in C and Data Structures, Analog Electronics, Digital Electronics, Network Analysis

CERTIFICATIONS:

- Have certification and hands-on experience in Cloud Fundamentals, AWS Cloud Content Management, and Apache Kafka from the Mphasis Limited platform.
- Gained Programming for Everybody (Getting Started with Python), University of Michigan, training from the Coursera platform.
- Attended training and have hands-on experience and certification on Restful web services, Java Microservices, Git, and DevOps Essentials from the Mphasis limited platform.

SKILLS

Programming languages: C, C++, Python, Java, Spring.
Web Services: Restful web services, Java Microservices, Git, DevOps Essentials, Cloud Fundamentals, Cloud Content Management, Apache Kafka.
Scripting Languages: Wireshark, PowerShell.
Web Technologies: HTML, CSS, JavaScript, jQuery, React.js, Node.js.
Databases: MySQL
Cloud and DevOps: AWS (EC2, S3, IAM, Lambda, RDS, VPC), Kubernetes (EKS, ECS), Docker, AWS CLI, CI/CD (CodePipeline, CodeDeploy).
Operating Systems: Linux, Windows.
Cyber Security: Privileged Account Management, Identity & Access Management.
Embedded Systems: Arm Cortex M3, Verilog, VHDL.
Simulators and Verification: Xilinx Vivado, MATLAB, Network Simulator 2, ARM Keil u, Vision Programming.

ACHIEVEMENTS

- Awarded first place by NA Global Law School for the 'Legal Literacy and Awareness Quiz'. ·

WORK EXPERIENCE

Mphasis Limited ***Software Engineer,*** *September 2021-July 2023*
Project Description:

- Developed a secure, high-performance banking platform integrating backend and frontend using Java, MySQL, HTML, CSS, and JavaScript.
- Built custom models and SAR (Suspicious Activity Report) forms to meet strict regulatory compliance.
- Contributed to RCT (Risk Management and Compliance Technology) for enterprise-wide risk detection and

reporting.

- Implemented Actimize AML-SAM for anti-money laundering (AML) and suspicious activity detection.
- Worked with AIS (Actimize Integrated Surveillance) and RCM (Risk Case Manager) to manage alerts and follow-up actions.
- Utilized Actimize Customer Due Diligence (CDD) for risk-based AML compliance and customer lifecycle management.
- Ensured end-to-end risk management, focusing on customer impact minimization and compliance through dynamic, risk-based processes.

Activities Performed:

- Developed customized solutions on the Actimize platform using Actimize Risk Case Manager, AIS Modeler, Java, HTML, CSS, JavaScript, and MySQL.
- Created and enhanced RCM and AIS objects to meet client-specific requirements, boosting platform functionality and usability.
- Actively contributed to project planning, milestone management, and continuous skill development, ensuring timely and efficient delivery.
- Conducted strategic analysis of client data, crafting precise specifications and tailored solutions for improved risk management and compliance.
- Recognized for proactive project management and innovative problem-solving, significantly enhancing user satisfaction and operational efficiency.

OTHER PROJECTS: (During Masters & Bachelors)

1. **Recipe Finder – Full-Stack Web Application [Team of 4]**
   Technologies and Tools Used: React.js, Node.js, Express, MongoDB, Mongoose, JavaScript, CSS, HTML5, AWS EC2
   Developed a full-stack MERN application for managing a recipe database with features to initialize the database, search recipes by name, ingredients, or description, and display results in a responsive card layout. Built the backend with Node.js and Express for data handling using MongoDB, and created a dynamic React frontend with controlled forms, recipe cards, and detailed views. Implemented an add-recipe feature with ingredient auto-suggestions and a favorites system for managing and viewing favorite recipes. Deployed the application on AWS EC2 for live access.

2. **Handwritten Digit Recognition using Convolutional Neural Networks [Team of 3]**
   Technologies and Tools Used: Python, TensorFlow, Keras, CNN, NumPy, OpenCV, Jupyter Notebook
   Contributed to a team project on handwritten digit recognition using Convolutional Neural Networks (CNNs). Developed a model to identify the digit '9' from the MNIST dataset, despite training on limited data (digits 0-5). Designed and implemented the CNN architecture, performed image preprocessing, and trained the model to extract key features for accurate predictions. This project highlighted my deep learning, image processing, and problem-solving skills, using Python, TensorFlow, Keras, NumPy, OpenCV, and Jupyter Notebook.

3. **Development of a Flutter-Based Agriculture Management Application [Team of 3]**
   Technologies and Tools Used: Flutter, Dart, TensorFlow Lite, LGBM Classifier
   Worked on DigiFarmer, a cross-platform smartphone app providing AI-driven insights for farmers. Developed with Flutter and Dart, the app features real-time weather updates, market prices, inventory management, and crop monitoring. Integrated TensorFlow Lite and LGBM Classifier for disease diagnosis and crop quality monitoring, even in low-connectivity areas. Ensured GDPR/CCPA compliance, secure user authentication, and data encryption. The project optimized farming operations, enhanced decision-making, and improved productivity.

4. **Implementation of Vedic Multiplier [Team of 4]**
   Technologies and Tools Used: Verilog/VHDL, FPGA
   This Project aims to implement Vedic mathematics algorithms using a high-level description language. A Comparison is made between results based on Vedic Methodology and stereotyped multipliers. This multiplier is implemented using the sutras Urdhva- tiryakhbyham, Modified Urdhvva Triyakbhyam, Ekanyunena Purvena.