A result-oriented professional, targeting assignments in

#### **Software Engineering**

with an organization of high repute, preferably in

Bengaluru / Remote

#### CONTACT ME AT

 Bengaluru
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https://github.com/sria91

#### EDUCATION

- Masters in Industrial Automation and Robotics Technology from NIE, Mysore with CGPA 9.40 in 2015
- Bachelors in Electrical and Electronics Engineering from NMIT, Bengaluru with CGPA 8.14 in 2012
- Diploma in Electrical and Electronics Engineering from SJP, Bengaluru with 65.28% in 2009
- SSLC from GHS, Bengaluru with 88.16% in 2006 (Secured School First Rank)

#### CORE COMPETENCIES

- Application Development
- Automation Engineering
- Robotics Engineering
- Image Processing
- Computer Vision
- Image Analysis
- • Pattern Recognition
- • Artificial Intelligence
- • Requirement Gathering
- • Testing and Troubleshooting
- DevOps Engineering
- Client Relationship Management

# **SRIKANTH ANANTHARAM**

## **PROFILE SUMMARY**

- An achievement-driven versatile Software Practitioner with nearly 8 years of rich and extensive experience
- Skilled at analyzing information system needs, evaluating end-user requirements, designing custom solutions and troubleshooting complex information systems
- Multi-disciplinary exposure gained by working in a variety of proofs-of-concept & projects related to Sensor Fusion, Robotics, Image Processing, Embedded Systems, Internet of Things, Artificial Intelligence, Test Automation & Functional Safety
- **Proficient at maintaining quality of applications**, delivering high-quality customer experience while adhering to the SLAs and work processes
- Experienced in using various software development methodologies such as Agile, Scrum, Waterfall, etc
- Capable of recognizing prospects to improve current software by employing innovative problem-solving techniques, optimizing code, and strategically integrating new features
- Extensive experience in developing applications using various programming languages such as Rust, Python, C++, C and MATLAB; also familiar with C#, HTML, CSS and JavaScript
- Well versed in using Linux and Windows operating systems; also familiar with macOS
- Highly skilled in Build / Release / Software Configuration using various DevOps tools such as Visual Studio, Visual Studio Code, Eclipse, PyCharm, MATLAB, Git, GitHub, GitLab, Travis, AppVeyor, Jira, Confluence, Jenkins, MSBuild, CMake, Make, Docker, Kubernetes, AWS, Google Cloud, etc
- Profound hands-on **experience with embedded** micro-computers like: NVIDIA Jetson Nano, Intel Movidius NCS, Raspberry Pi, BeagleBoard-xM, Arduino, mbed, 8051
- Experience with hardware/software interfacing technologies like: UART, I2C, SMBus, SPI, PWM, GPIO
- **Strong work ethic**, positive attitude and leadership qualities with ability to work independently and in a team environment
- Passionate about learning new technologies and keeping up with the latest trends

## WORK EXPERIENCE

Aug'22 to Aug'23 with Saven Nova Technologies, Bengaluru Technical Lead

Key Result Areas:

- Developing hyper-spectral image processing solutions for object detection and analysis
- **Designing and developing advanced algorithms** for dot blot detection and analysis for accurate analysis of biological data
- **Performing linear spectral unmixing of dot blot** and western blot images ensuring accurate identification and separation of specific signals
- Preparing and preprocessing image datasets for analysis, ensuring data quality and consistency
- Conducting rigorous testing and evaluation of image processing algorithms to assess the accuracy, efficiency and robustness
- Collaborating with Front-End, Back-End and QA Teams; streamlining end-to-end software development process

May'22 to Jul'22 with Emrit Inc., Remote

#### Senior Analyst Key Result Areas:

- Evaluated and deployed openBalena for optimized management of IoT devices
- Developed software for implementing secure over-the-air firmware updates to the IoT fleet using peer-to-peer model with IPFS
- Streamlined DevOps pipelines for Debian packaging of the OTA software

Mar'21 to May'22 with L&T Technology Services, Bengaluru Senior Engineer

#### Key Result Areas:

- Developed functional safety software stack for Embedded IoT in C
- Automated post-silicon validation with Python 3

#### SOFT SKILLS

- Team Player
- Collaborator
- Communicator
- Innovator
- Planner
- Thinker

## CERTIFICATIONS

Architecting with Google Kubernetes Engine Specialization from Coursera – Google

Software Architecture: From Developer to Architect, Software Architecture Foundations from LinkedIn Learning

Advanced Design Patterns: Design Principles from LinkedIn Learning

Programming Foundations: Object Oriented Design, Programming Foundations: Test Driven Development from LinkedIn Learning

Rust Essential Training from LinkedIn Learning

C++ Best Practices for Developers from LinkedIn Learning

How Git Works, Mastering Git, Working with Git Branches, Rewriting Git History from Pluralsight

Python Desktop Application Development from Pluralsight

HTML Fundamentals, JavaScript Basics, SQL Fundamentals from Solo Learn

Introduction to Linux from edX – The Linux Foundation

Internals of PC from Escube IT Systems Solutions

Diploma in Office Management Application from MVS Computer Institute, Yalahanka Jun'19 to Mar'21 with Wipro Technologies, Bengaluru Senior Project Engineer

#### Key Result Areas:

- Maintained software projects related to multimedia analysis for test automation and Windows OS installation for validation
- Created GUI, adopting an MVC framework to assist developers in analyzing GNSS logs
- Developed backend and REST API development for a Chatbot specializing in log analysis

## **PREVIOUS EXPERIENCE**

Dec'16 to Jun'19 with R&D Lab, UST Global, Bengaluru as Embedded Software Developer May'14 to May'15 with MED, NIE, Mysore as Teaching and Research Assistant Jul'12 to Jul'13 with R&D Center, NMIT, Bengaluru as Research Associate

## **TECHNICAL SKILLS**

Cloud, DevOps	: AWS, Google Cloud, Docker, Kubernetes, GitHub, GitLab, Travis, AppVevor
Data Science, Artificial Intelligence, Machine Learning & Deep Learning	: Multi-sensor Data Fusion, Supervised Learning, Regression, Classification, Object Detection, Object Segmentation, pandas, scikit-learn, Keras, TensorFlow, PyTorch, MXNet, GluonCV, OpenVINO
Robotics & & Automation	: 2D Differential-drive Mobile Robot, 1D/2D Cartesian Robot
Embedded Devices	: NVIDA Jetson Nano, Intel Movidius NCS, Raspberry Pi, Arduino, BeagleBoard-xM, mbed, 8051
Tools, Libraries & Frameworks	: PyMongo, Sphinx, Flask, PyQt5, Kivy, PySide2, IPython, SciPy, Matplotlib, NumPy, Cython, Angular JS, W3.CSS, GStreamer, SDL, OpenCV, Eigen, OpenSceneGraph
Coding Languages	: Rust, Python, C++, C, Embedded C/ C++, MATLAB, SQL, MicroPython, Shell Scripting, PLC, LISP, HTML, C#, JavaScript
Operating Systems	: Windows 11, UNIX-like: macOS, Raspbian, Ubuntu, Angstrom, Poky, Arch
Office Suites	: MS Office (Word, PowerPoint, Visio, Excels), LibreOffice, WPS Office
IDEs	: Visual Studio, Visual Studio Code, PyCharm, Spyder, Jupyter, MATLAB, Eclipse

## PUBLICATIONS

- Synthetic Aerial Image Generation for Miniature Aerial System, presented paper at International Conference on Trends in Automation, Communication and Computation Technologies (ITACT), Acharya Institute of Technology, Bengaluru; published in IEEE Xplore in Dec'15
- MAS Simulator: A Laboratory Set Up, International Conference on Cognitive Computing and Information Processing (CCIP) at JSS Academy of Technical Education (JSSATE), Noida in Mar'15
- PhotoScenery for Realistic Scene Generation and Visualization in FlightGear: A Tutorial, presented paper at the International Conference on Emerging Trends in Electrical Systems (ICETES), Mar Athanasius College of Engineering (MACE), Kerala in Dec'14
- Robotics Research at NMIT, Indian Technology Congress, Bengaluru in Jul'13
- Vision-based Interactive Robotic Exhibits for Museums, first IEEE International Symposium on Cost-Effective Museum Exhibits in Engineering and Applied Science, Braj Mohan Birla Science Centre (BMBSC), Hyderabad in Dec'12
- Development, Implementation and Optimization of Real Time Target Tracking Algorithms on BeagleBoard-xM

## PERSONAL DETAILS

Date of Birth: 4<sup>th</sup> May 1991 Address: Chandapura, Bengaluru- 560099 Languages Known: English, Hindi, Kannada and Telugu

Please refer to the annexure for a list of projects.

### ANNEXURE

- Design and Development of Dot Blot Detection and Analysis Algorithm
- Linear Spectral Unmixing of Dot Blot and Western Blot Images
- REST Web Service Development
- Setting up DevOps Pipelines for Packaging Optimized Builds of IPFS and IPFS Cluster Programs
- Functional Safety Software Stack Development
- Post-silicon Validation Automation
- Back-end & REST API Development for Chatbot that performs Log Analysis
- Maintenance of Windows OS Installation Tool
- Maintenance of Multimedia Analysis Tool
- GNSS Log Analysis Framework (GLAF)
- ThingG
- iPLMS
- USB Device Testing Robot
- Deep Learning based PCB Asset Classification and Liveness Detection Robot
- Implementation and Validation of Vision-based Ground Target Geo–Localization for Miniature Aerial System
- PhotoScenery for Realistic Scene Generation and Visualization in FlightGear
- Design and Development of Robot Mechanisms, Vision and Control Algorithms
- māhiya: Development of a Real-Time Human Tracking Capability on a Mobile Platform
- Autonomous Mobile Robot Control, Localization, and Path Planning
- Soft-starter: Automatic Star-delta Starter using a Microcontroller

More details about the projects are available at <u>https://srikanth.one/#projects</u>

My blog is live at <u>https://blog.srikanth.one/</u>