Email: venugopalgpai@gmail.com Mobile: +91-9633813585

Summary

Graduate in Electronics and Communication with expertise in development, prototyping, analysis, and implementation of algorithms in Image Recognition, Object detection, 3D Reconstruction and fluoroscopic sequential data processing.

- Proficient in software engineering concepts, principles, and techniques with a proven competitive and professional track record.
- Reputation for defining, testing, and validating complex architectures for high scalability and high-performance environments.
- Adept at working with large and complex data sets to develop methodologies to foster the creation of novel software applications.
- Ability to adapt rapidly to new environments and fields of study, such as mathematical modeling, machine learning and its applications across fields like bio-medical and finance.
- Socially committed and an active participant in building a technologically aware and active community of youngsters, thereby empowering them to solve the vital challenges of society through technology and alternative education.

EDUCATION

• Government Engineering College

Bachelor of Technology in Electronics and Communication; GPA: 6.77

Barton Hill, Thiruvananthapuram, India July. 2010 – June. 2014

• Saraswathi Vidyalaya

CBSE Percentage: 89

Vattiyoorkavu, Thiruvanathapuram, India June. 2008 – March. 2010

Professional Experience

• Triassic Solutions Pvt Ltd

Senior Software Engineer

Technopark, Thiruvanathapuram, India Jan 2016 - Present

- APNHealth: Worked for a new medical device company that has developed proprietary and patented software algorithms to create an innovative and cost-effective 3D cardiac imaging system. These algorithms are capable of using real-time 2D fluoroscopic image data to locate the precise 3D x-y-z location of cardiac catheters. This information is then incorporated with other integrated algorithms and a display screen to create 3D maps that can be used for catheter mapping and ablation of cardiac arrhythmia. Worked with industry leaders in implementing real-time systems for
 - * Detecting catheters and other objects in fluoroscopic images.
 - * Cryoballoon localization.
 - * Developed 3D reconstruction technique for cardiac chamber locations.
 - \ast Respiration gating using back-projection of sequentially-acquired 2D fluoroscopy sequences, patient/table motion correction.
 - \ast Designed methodologies to foster the creation of novel software applications (patents pending).

• Triassic Solutions Pvt Ltd

Technopark, Thiruvanathapuram, India July 2014 - Dec 2016

Software Engineer

• Aventri: Build a very robust event management platform, custom tailored to clients' needs. As an architect, I drive the software architecture and platform choices made in my department. I manage external maintenance crews and work directly with technical teams to ensure 100 percent uptime for all our systems.
Build and maintained the company's first data warehousing system for reporting. This highly scalable platform includes a near real-time ETL process, allowing transactional data to be analyzed immediately. I'm also responsible for building the highly scalable 3 Stage (Dev, UAT, Prod) deployment pipeline and the fully automated alerting system supporting approximately 300 servers across 5 timezones.

- * Setup replicable Puppet based server deployment system in lines with the infrastructure should be code ideology.
- * Setup a 3 Stage deployment system using Jenkins and Capistrano.
- * Developed custom build and monitoring tools to support our multi-language codebases.
- * Setup multi-stage alert systems using Nagios, Cloudwatch, and VictorOps to monitor and ensure uptime for our servers and other infrastructure.
- * Setup advanced monitoring system to identify performance bottlenecks and codebase issues in various stages of development using New Relic and custom build debugger /audit tools.

• Communique

Creative Consultant

Statue, Thiruvanathapuram, India Jan 2013 - June 2014

- **Designer**: The Creative Internship at Communique gave me a thorough understanding as to how a branding agency works. Here I was responsible for creating design templates and fine-tuning designs to suit specific client needs. I was involved in making creatives, websites, documents and managing creative elements of the campaign.
 - * Developed websites and worked in the branding campaign for Leela Backwaters.

EEG, as a consumer product, right after winning the title of "Manorama Yuva Mastermind".

- * Designed creatives for the ADAM course for Mercedes Benz.
- * Worked on multiple magazines and creatives for different graduate schools.

• Dionz

Papanamcode, Thiruvanathapuram, India Sept 2011 - Dec 2012

Lead Programmer

Sept 2011 - Dec 2012

• EEG Controlled Wheelchair: Dionz stemmed from the idea of creating a "Mind Controlled Wheelchair" using

Volunteer Experience

• Sahridhaya

Statue, Thiruvanathapuram, India Jan~2015~-~Present

Project Lead

- Sahridhaya: aims to bring the youth a fresh opportunity to participate in social events and establish the need for social responsibility and social commitment. Here I was responsible for designing and managing projects focusing on technical education among school and college students. As a part of the initiative, I lead the team that designed two projects.
- Bit Please: A 3-month long program college students to improve their coding skills and learn real-world
 engineering skills like software engineering, ML, data analysis, etc. The team has done fellowships with IIT-B in
 different areas. The current team is working with the district collectors office on optimization problems on different
 aspects of the city.
- Creating Unique Brains (CUB): A 3-month long program that identifies school students from socially weak backgrounds, providing technical skills to the team by partnering with interested college students and engaging the team in a socially relevant project.