

## Trainer Profile – Gopalkrishnan

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### Profile

- Mentor, Trainer, Software Architect & Consultant, specialized in Node.js, MEAN Stack, AngularJS, Hybrid Mobile App framework Cordova/Phonegap, Ionic with Best Practices, Advanced Topics, Design Patterns, Architecture, REST, HTTP, Security, Task Automation, Unit Testing, Coding Standards that solve day to day problems faced by developers and software architects.
- Train advanced topics with a project setup, that helps Software Developers and Architects to map to real time application development, apply the learning to real time applications they build day to day, get deeper understanding of technologies, improve code review, achieve high quality delivery.
- Actively participate on JavaScript, IoT related Community Events, Conferences as speaker, giving insights into technologies, contribute to Open Source.

### Educational Qualifications

- Gandhigram Rural Institute  
Master of Science, Information Technology, 2000 - 2002
- University of Madras  
Bachelor of Science, Computer Science, 1997 - 2000

### Skillset

- Python JavaScript
- Agile Methodologies Linux
- MySQL
- Software Design Product Development Product Design Software Architecture Mobile Applications Node.js
- Software Development Cloud Computing Databases
- .NET
- Automation
- Software Project Management Embedded Systems
- User Interface Web Development
- Requirements Analysis Android
- .NET Framework
- Representational State Transfer (REST) AngularJS
- Talent Developer
- People Management Software Documentation Technical Support Mentoring

## Trainings Delivered

- AngularJS Advanced
- Ionic Framework Advanced
- Node.js, JavaScript, ES6
- MEAN Stack - Mongo, Express, Angular, Node.js
- Angular 2.0
- Jasmine/Karma for AngularJS Unit Testing
- Protractor/Jasmine/Cucumber for AngularJS E2E testing
- Internet of Things
- Industrial Internet of Things Data Science & Analytics Cloud
- Web, Mobile and PC Apps
- Node.js, AngularJS, Ionic Frameworks, ASP.NET MVC
- Industrial Sensors, Data Acquisition Handling Large Data
- Product Development Cloud, Big-Data
- Java
- .NET
- Node.js AngularJS
- Ionic Framework HTML5
- MongoDB, Redis, InfluxDB, Hadoop C/C++, Python

## Professional Summary

- **Mentor-Angular | React | Node.js | IoT at NodeSense | Angular | Node.js | JavaScript | IoT Training**

April 2015 - Present (2 years)

Mentor and Architect for AngularJS 1.5/Angular 2.0, React & Ionic Framework with RESTful web backend, train and help team to get started with projects with best practices, setup tool chain, HTTP/REST, set technology roadmap and directions, toolsets.

Mentor & Architect for IoT Platforms, Architecture, building apps on IoT platform, workshops and hands-on Run Corporate Training/Workshop on Bleeding Edge JavaScript Technologies

Run Corporate Training/Workshop on IoT Technologies

During training, we are flexible to use ASP.NET Core or Node.js/ExpressJS or Spring MVC for backend.

- AngularJS [3 days]
- Angular 2.0 [3 or 4 days]
- React & Redux [3 days]
- Node.js & ExpressJS, ES6 [2 days]
- MEAN Stack [3 days]
- Cordova/Ionic 2 [3 days]

Upcoming in-depth IoT workshops for Architects and Lead Developers, that connects sensors to cloud, covers Edge, M2M, Wired/Wireless networks, Protocols, streaming of Data, Data Storage, Analysis

using Hadoop and Spark Systems [4 or 5 days]

- **Chief Software Architect & Founding Engineer at Utthunga Technologies**

June 2006 - March 2015 (8 years 10 months)

Founding Engineer, Chief Software Architect, Emp #3, started in 2006, grown to 120+ people company in 2015, led Software Architecture, Design, Framework & Product Development for M2M/Industrial IoT.

Built Frameworks for Data Acquisition, Data Extraction and Normalization from Sensors, Edge Device Management (Network, Configuration, Monitoring & Diagnostic), Cloud Storage, Data Retrieval, Streaming, Visualization, Analytics, Message Queues, base for 70% of workforce in the company.

Developed Frameworks and Applications for SCADA, FDT-DTMs and OPC UA for top, leading industrial customers.

Developed protocol drivers for Modbus, HART, FieldBus, ProfiBus, Industrial Ethernet & vendor proprietary protocols, Serial/Ethernet/Wireless, 200+ different types of Industrial Devices, 30+ types of sensors and control valves, actuators.

Technologies: .NET, Java, XML, JavaScript, Node.js, AngularJS, Ionic Framework, Apache Spark, Storm, Hadoop, Influx DB, OpenTSDB, HTTP, REST, MQTT, Message Queues, ASP.NET MVC, Spring MVC, ExpressJS, Web, Mobile, Desktop and Backend Applications.

Specialist: Industrial Field Devices, Data Acquisition, Industrial IoT, Data Visualization, Sensor Data, Data Analytic, Data Storage, Monitoring

- **Consultant & Freelance Developer at Banner Engineering**

March 2007 - January 2009 (1 year 11 months)

Developed home grown GUI testing framework in VC++ for Windows based Machine Vision Application, to automate the testing of complex industrial machine vision application for World top most Machine Vision Sensors Manufacturers (Banner Engineering)

Automatic Perl scripts generations based on User Interaction with the application through process instrumentation.

Developed core test script framework that ran for 24+ hours continuously, reduced Weeks of manual testing effort into 12 hours' time, 80% time saving.

- **Design Engineer at GE Medical Systems Pvt Ltd**

July 2005 - June 2006 (1 year)

Designed and implemented a DICOM Push Library to send the images and videos to the DICOM SCP system in C++

Published detailed white papers on DICOM push. Worked on CORBA layer to remove complication found in the system

Published a detailed white paper and architecture for integration between two mainstream X-ray and Vascular systems to auto start scanning in the same time

Being part talent recruitment team for choosing candidate for system engineer and specialists Active participant in code review and design pattern discussions

- **Software Engineer at Mphasis**

January 2004 - June 2005 (1 year 6 months)

Worked on Computer Vision Application in Win32/MFC/VC++, building and testing tools for Machine Vision algorithms

Fixed resource leaks, memory leaks, socket and communication bugs Worked on Internationalization, supported 6 international languages. Volunteered for 4+ Projects Bug Fixes, Troubleshooting

Part of Code Review Team, helped other teams to ship the projects

- **Contractor, Freelancer & Project Mentor at Freelancer**

July 2002 - December 2003 (1 year 6 months)

Worked on VC++/MFC/Win32 Machine Vision Application for Kshema Technologies [Bangalore] for 3 months on contract basic, then hired full time [Kshema later acquired by Mphasis]

Worked for Kendra Technologies [Bangalore] for 3 months on contract basic, fixed many issues related to ASP and ASP.NET

Worked for Effic Systems, Erode, as Mentor for Engineering Students on VC++ and Java implemented below projects.

Implemented Swing based Mail client using SMTP and POP3 in Java from scratch Implemented SNMP v2 Monitoring application for in Java, Java Swing from scratch Implemented Custom, Remote Desktop sharing tool over LAN using VC++ without VNC

Implemented HTTP proxy server using Java, Supported HTTP/1.0 and 60% of HTTP/1.1 headers for proxies

Worked as Research Assistant for a PHD Scholar, Customized VNC protocol to send files, clipboard copy/paste images and text in VC++ across computers