Trainer Profile – Gopalkrishnan

Profile

- Consultant, Software Architect, Developer and Mentor with over 14+ years of working experience in Full stack web Applications, RESTful Web Services, Backend services, Single Page Web Applications and Hybrid Mobile Applications for IoT, Industrial & Enterprise customers
- Built frameworks, libraries, products for customers, helped company to grow
- Architected, developed 20+ applications on Web, Mobile and Backend applications.
- Good experience in architecting and developing applications using below technologies, has given many trainings for all types of developers including Junior Software Engineers to Senior Solution Architects
- Recognized Intel Software Innovator for Intel IoT, one of their 40+ developers recognized across India. He spoke in Intel Innovator Summit, presented IoT, NodeJS, Angular together

Skillset

- Angular 2
- Angular 4
- ReactJS
- Angular JS
- Node.js, Express JS
- Advanced JavaScript, ES6, TypeScript
- Ionic/Cordova/Phonegap
- Karma/Jasmine/Chai/Mocha Unit Testing
- Jasmine/Protractor
- JavaScript Design Patterns
- Web Security, CORS, XSS
- RESTFul and Streaming Data Applications backend

Educational Qualifications

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

Trainings Delivered

- Advanced AngularJS 1.5 (2 days) – HCL Technologies
- Advanced AngularJS 1.5 (3 days) – SAP
- Advanced AngularJS 1.5 + ReactJS - CapGemini
- Advanced AngularJS 1.5 (3 days) – Barclays Bank
- Advanced AngularJS 1.5 (3 days) – KPIT

- Advanced Angular 2 - (3 days) L&T (5+ trainings)
- Advanced Angular 2 – ValTech
- Advanced Angular 2 – Diaspark
- Advanced Angular 2 – IBS
- Advanced Angular 2 (3 trainings)
- Advanced Angular 2 – Global Logic, Noida
- Advanced Angular 2 – Global Logic, Nagpur (2 Training)
- Angular 2 – Vedic Systems, Hyderabad
- React JS + Redux – (3 days) – Sapient
- Advanced Angular 2 – (4 days) Quintiles IMS
- Advanced AngularJS 1.5 with Ionic Framework (3 days) Happiest Minds
- Angular 1.5 – Edleweiss, Mumbai (2 trainings)
- ReactJS – Private client
- Angular 2 with Webpack (2 days) HappiestMinds
- Advanced Angular 1.5 (L&T Info Tech)
- AngularJS 1.5 with Ionic 2 (3 days) (Happiest Minds)
- Advanced Angular 2 (L&T Technology Services) Bangalore (4+ trainings)
- Advanced Angular 2 (L&T Technology Services) Mysore (2 trainings)
- ASP.NET MVC, Web API, AngularJS (IRIS) – 5 days
- Advanced AngularJS (Private client) – 3 days
- Node.js, Express, Mongo DB (MEAN Stack) with Angular Advanced – 5 days
- Advanced AngularJS 1.5 (BSOL)
- Advanced Angular 2 (AXISRoom)
- Angular 1.5 – Infinite Computer Solutions
- Angular 1.5 – SAP Ariba (3+ trainings)
- ReactJS – AxisRoom
- ReactJS – Private Workshops
- Protractor, Jasmine with Angular 2 – L&T
- Protractor, Jasmine with Angular 2– SAP Ariba
- Karma, Jasmine – Noida
- Advanced JavaScript – IBS
- Open Public Workshops on Angular JS – 8+ Workshops
- Open Public Workshops on Angular 2 – 4 Workshops
- Open Public Workshops on React – 3 workshops
- ExpressJS Meetup (Did workshop for 100+ audiences in Target Office) (JSChannel Meetup, Bangalore)
- Node.js with IoT (Talk on CAFIT Conference)
- Node.js & IoT 2 Workshops at CAFIT Conference
- Angular, Mobile, Web Desktop Universal app (Intel Innovator Submit Talk)
- Ionic 2 with Angular 2 (Meetup talks and workshops)
- NIT Surat, Hackathan (Talk on IoT Node.js, AngularJS, Mentor for IoT Track)

Professional Summary

- **Mentor-Angular | React | Node.js | IoT | Angular | Node.js | JavaScript | IoT Training**
  April 2015 - Present (2 years)

  Mentor and Architect for AngularJS 1.5/Angular 2.0 / Angular 4, 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 MpahsiS]

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 header s 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

- Certificate of Appreciation for Team Outstanding Performance from Prolifics (Previously Semanticspace Technologies), Hyderabad for AETNA EIE Frameworks and Patterns Project in 2015.

- Certificate of Appreciation for Individual Outstanding Performance from Prolifics (Previously Semanticspace Technologies), Hyderabad in 2013.

- Certificate of Appreciation for Team Outstanding Performance from Prolifics (Previously Semanticspace Technologies), Hyderabad in 2013.

- Certificate of Appreciation for Outstanding Performance from Turning point software solutions, Bangalore in 2006.

Projects

- Implementing IoT Mobile App Framework by using Angular 2, Ionic 2 for Web, Desktop and Mobile Applications, with Node.js Backend, Grafana, Hadoop, Spark Analytics

- Architected, designed Loan Application portal for a financial startup, with Angular 2, MongoDB actively lead the code, design review for client side application architecture (project under development)

- Implemented Product Selection tool for leading manufacturing company using Angular 2, Node.js/Express backend, Mongo DB.

- Implemented Web based Configuration Tool for Temperature Measurement device, with Java Backend using Angular 2, designed a configuration framework for device, and then built on top home grown framework.

- Architected and designed a data acquisition, storage, analytics and visualization tool using AngularJS, OPC UA, MQTT, Hadoop, HBase, OpenTSDB, Grafana for a US based, leading flow sensor manufacturing

company.

- Designed complete solution for Solar Plants, from configuration of Field Devices, Network Topology, Device Profiles, Data Collection Gateways, Store and Forward of Modbus Data with OPC UA and MQTT, led architecture, design and implementation.

- Build Web based Data Visualization platform for Mongo DB, AngularJS, NodeJS, ExpressJS, Redis Database. Ported Dashboard to Ionic Mobile Application.

- Build Ionic/Angular Cordova application framework for Field Device configuration & diagnostic, calibration tools.

- Freelancer for ReactJS, designed, built React application architecture, component design for a startup, with backend on Express/MongoDB

- Consultant for ReactJS application, did code review, performance analysis, improvements on React Application

- Worked on Product Specification Node.js backend and Cordova/Ionic Mobile App Development for Android and iOS Devices. Worked on Mongo DB, Node JS, ExpressJS, Angular JS, Elastic Search, Cordova, Ionic Framework.

- Developed Angular JS Based Configuration framework for a world leading Flow Sensor manufacturers, led the application development, designed framework on top of AngularJS, REST APIs.

- Founding Engineer of 120+ Developers Company, started in 2007 with 4 Technologist (Employee #3), led software architecture, product delivery & team for desktop, mobile & web applications development with top leaders in industrial automation, worked exclusively on M2M, Web, Mobile and Data Platforms. Trained the developers, developed their skills.

- Innovated & Implemented a cross platform DPI (Device Programming Interface), a Rapid Application Development Framework using .NET & XML for Industrial Sensor & Transmitter Data Acquisition, Sensor & Transmitter Configuration, framework is base for 70% of company workforce. Ported solutions to Android, iOS, Windows platform.

- Worked with many IoT, networking protocols extracting, normalizing, transforming Sensor Data with 200+ different types of Industrial Devices on Serial Ports, TCP/IP, Wireless, Bluetooth using .NET, Java and few Node.js.

- Implemented an Equipment Service platform for Textile industry using Spring MVC, Java, ReactJS for front end.