

# Girish M

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<https://girishm.info>

## SUMMARY

Girish is a software engineer with more than twelve years experience in software development using industry standard frameworks.

## SKILLS

- Programming languages familiar with: JavaScript/ES6, Java, Go
- CI/CD: Docker, Azure VM, Jenkins, Git
- AI/ML: Azure ML, Azure Quantum Elements
- Back-end development: Node.js, Spring Boot
- Operating Systems: GNU/Linux - Debian, Ubuntu, Guix

## EXPERIENCE

*Independent Software Consultant*

August 2019 -

- Deploying AI/ML models such as Microsoft's MatterGen and MatterSim on Azure ML to enable Matter Alchemy (<https://matteralchemy.ai>) for industries to accelerate material research and innovation
  - Developed a website to provide information for the product, signup and newsletter
  - Created context and component diagrams for the software architecture
- Developing integration for OpenProject GmbH to support new functionalities with Element/Matrix for OpenProject project management software
- Worked on building integration and plugins for Mattermost
  - OpenProject integration for Mattermost - <https://github.com/girish17/op-mattermost> : developed using JavaScript/ES6
  - OpenProject plugin for Mattermost - <https://github.com/girish17/op-mattermost-plugin> : developed using Go
  - BlackJack game for Mattermost - <https://github.com/girish17/mattermost-blackjack> : developed using Go
- Deployed integrations on Azure VM cloud and Akamai Linode
- Programming languages and tools used: JavaScript/ES6, Go, Node.js, REST API, Bash, GNU/Linux, Docker, Azure, Linode

*Software Developer, 42Hertz (later acquired by Cisco)*

January 2019 to July 2019

- Used asynchronous functions and callbacks in C++ 17 to prototype Buttons and Cards feature for Cisco WebEx teams app for desktop
- Fixed bugs and provided solutions to development environment setup issues
- Created user stories and estimated completion time
- Developed integration tests for a user story
- Developed RESTful microservices to support CRUD operations
- Programming languages and tools used: C++, Spring Boot, JavaScript, Java 8, Mac OS X, IntelliJ Idea, Postman, Jenkins

*Project Engineer, Indian Institute of Astrophysics* December 2017 to December 2018

Worked as a member of the India Thirty Meter Telescope (TMT) software work package team coordinating the test and integration of the software delivered by the vendor and carried out quality checks.

- Used Protobuf models to port Java/Scala objects to C/C++
- Used IntelliJ IDE with Java on GNU/Linux platform to test and debug code for the observatory software
- Worked with automation of test suite using Bash shell script on GNU/Linux to generate test reports
- Created trade-study document for capturing user interface tool options using Confluence
- Used Precision Time Protocol (PTP) to work on a case study for time synchronisation between devices
- Software tools and Programming languages used: Bash, GNU/Linux (Ubuntu), Scala, C/C++, Git, Jira, Confluence

*Teaching Assistant, Indian Institute of Science* August 2017 to December 2017

- Teaching assistance, evaluation and course administration for Algorithms and Programming course to BS students
- Created a script for result notification to students via email for consolidated scores using Google APIs
- Software/tools used: C, GNU/Linux (Fedora), Vim, GNU Debugger, Google API

*Software Engineer, Bharat Electronics Limited* November 2012 to November 2016

- Created Software Requirement Description (SRD) for capturing functional requirements of a software subsystem
- Created database schema and designed tables using Oracle 10g
- Used JavaScript and JQuery for rendering data from services in clients through AJAX requests
- Provided analytics to visualise information by customising JQPlot JQuery plugin
- Debugged client side UI code using Firebug extension of Mozilla Firefox
- Developed RESTful web services for create, read, update and delete (CRUD) operations using Spring MVC
- Used Hibernate Object Relational Mapping (ORM) and Java Persistence API (JPA) for Data Manipulation Language (DML) operations
- Developed reusable JavaScript modules using Asynchronous Module Definition (AMD) and load using Require JS for improved webpage performance and code maintenance
- Software/tools used: JavaScript, JQuery, Spring MVC, Hibernate ORM, Apache Maven, JBoss AS, Microsoft Windows 7, Eclipse IDE, Microsoft Visio

## EDUCATION

Bachelor of Engineering in Computer Science

PES Institute of Technology, Bangalore (now PES University), 2008 - 2012

Secured First Class with Distinction