# Ishwarachandra Gowtham

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**SUMMARY** 

Hands-on software developer with over **16 years** of diverse experience in software development and design, looking for a challenging **technical** role in a software product development company.

#### TECHNICAL SKILLS

- Platform: UNIX, Linux
- *Languages:* Well versed with Python 3, Flask, SQL, and Shell scripting. Familiar with Quart, Django, Fast API, React JS, Angular JS, Java, JSON, YAML, HTML, XML, C++, C, PL/SQL, and Perl.
- Database: Oracle, Postgres, InfluxDB and MySQL
- Tools: Git, Docker, Kubernetes, OpenStack, Azure, Jira, Confluence, vim, debuggers, etc.

#### WORK EXPERIENCE

**Microsoft Corporation,** Bangalore (Software Engineer 2)

Jul 2019-Present

- Worked as Principal Software Engineer at Affirmed Networks, Bangalore, from July 2019 till October 2020.
- Microsoft acquired Affirmed Networks in March 2020.
- Continuing with the same role as was with Affirmed Networks.

Leading the tools and automation team, responsible for designing and developing **Python** based microservices, automation frameworks and tools for enabling various teams at Affirmed.

Responsibilities and accomplishments:

- Design and develop **microservices** (**REST APIs** and server applications) using *Python*, *Flask* and *Quart* to run on *Kubernetes* to help with testing and development.
- Design and develop **Python** based **automation frameworks** and **tools** by making use of concepts like **meta-programming**, **context-manager**, **generators**, **decorators**, etc.
- Designed and developed a *full-stack web application* for analyzing and detecting applications from a packet capture (**PCAP**) file using *Python*, *Flask* and *ReactJS* by imbibing **data science** concepts.
- Built a 4-member team and introduced Agile methodologies.
- Provide technical leadership and mentor junior team members.

### **Sandvine Technologies,** Bangalore (Senior Software Developer)

Nov 2017-Jul 2019

Worked as a Developer for the global tools team (which designs and develops **Python** based tools and automation frameworks for enabling R&D and test organizations at Sandvine).

Accomplishments:

- Designed and developed a *full-stack web application* for **analytics** using *Python*, *Flask*, *InfluxDB* and *AngularJS* for **analyzing** product performance test run data by imbibing **data science** concepts.
- Enhanced the **Python** based QA automation framework by making use of concepts like **meta-programming**, **context-manager**, **generators**, **decorators**, **traits**, **pytest fixtures** and **hooks**, etc. Also developed modules as part of fully automating the **continuous integration** (**CI**) system.
- Enhanced the lab systems automation framework using *Django* by providing **REST** APIs for adding and retrieving data from database tables.

# Oracle India Development Center, Bangalore (Senior Member of Technical Staff)

Mar 2015-Nov 2017

Worked as a Developer and SME for a high-performance in-memory database named COMCOL. This database has a strong networking component and supports various tiered topologies and high availability (HA). *Accomplishments:* 

- Enhanced and maintained core product modules using C++.
- Troubleshoot customer reported problems by finding the root cause and provide resolution.

Worked as a Developer and Scrum Master for the Platform Automation team which provided **SaaS** (**cloud** based) applications for functional test automation for *Oracle CGBU Signaling Platform*, by using **Agile** methods, continuous integration, dynamic languages, open-source software, and **DevOps** principles to maximize automated platform testing.

Accomplishments:

- Developed various **Puppet** modules including one for automatic replication of database using a master-slave setup.
- As Scrum Master oversaw Sprints and Kanban based on the type of the user stories.

#### **Relecura** (formerly **INDUS TechInnovations**), Bangalore (Senior Systems Engineer)

Dec 2013-Jul 2014

Worked as a Developer for the *term-extractor* team, which is responsible for all the server-side technology for <u>Relecura</u> (Relecura is an analytics and IP (Intellectual Property) Intelligence platform).

Accomplishments:

- Designed and developed modules in **Java** to **mine** and **analyze patent related information** using *JDOM2*, *Apache PDFBox*, *Apache POI*, etc. and load them into MySQL tables using **JDBC**.
- The format of the XML files containing patent related information either follows couple of industry standards or is proprietary.
   Designed and developed a module in Java to parse and extract patent related information from the XML files irrespective of the format, which included making use of the Java Reflection API.

**Thomson Reuters,** Bangalore (*Technical Lead, Software Engineer*)

Mar 2008-Dec 2013

Worked as a Technical Lead and Developer for the Thomson Reuters IP&Science MIS team (*Global Turnkey Systems*). *Accomplishments:* 

- Reduced the risk to the business by successfully leading an effort to **re-engineer** and **re-platform** a manually run legacy 4GL (written using Informix 4GL) product usage and revenue reporting application (used to report multi-million-dollar revenue). The new applications were developed using **PL/SQL**, **Perl**, and **Shell scripts** with **Oracle 11g** as the database. Improved the performance considerably by reducing the application run time from 2-3-man days to under an hour by fully automating it.
- Designed and developed a desktop application using **Java FX** interacting with **EJBs** (deployed on the Glassfish server) backed by **PL/SQL** stored procedures (Oracle 11g) for replacing a set of legacy text-based UI applications used by the business users to correct and validate revenue data.
- Designed and developed several complex search routines using **PL/SQL** by making use of **dynamic query building** and **ref cursors** for searching contracts, orders, customer records and items.
- Designed and developed an application in **PL/SQL** for **data analysis**, **data validation**, **data correction** and **data extraction** for easier migration of data from *Global Turnkey Systems* into SAP.
- Designed and developed a **SOAP web services client** in **PL/SQL** by making use of *UTL\_HTTP* package for getting real-time tax information from *Sabrix* for use with *techstreet.com* (a sub-division of Thomson Reuters).
- Designed and developed an application for interacting with external systems responsible for credits and collections (GETPAID).
   The application was designed to make use of Oracle Job Chaining and Scheduler, PL/SQL, Perl, and shell scripts.

**Hewlett Packard India Software Operations (STSD),** Bangalore (*Systems Software Engineer*)

May 2006-Jan 2008

Worked as a Developer for the **HP OpenView TeMIP** Fault and Trouble Management (*FTM*) team (*TeMIP* is an OSS product) and the **HP OpenView Microsoft Smart Plug-ins** team (*Smart Plug-ins* or *SPI* are pre-configured software modules that plug into the *HP Operations Manager* to help an enterprise maintain the availability and performance of their distributed IT infrastructure).

Accomplishments:

- Enhanced and maintained modules related to Fault and Trouble Management (FTM) using C++ and C.
- Enhanced and maintained modules related to MS Exchange SPI and MS Active Directory SPI using C++.
- Designed and developed an UNIX based **command line interface** using **C++** for editing and deploying an XML file containing monitoring parameters for *MS Exchange Server* to various OpenView server managed nodes.

# **Thomson Financial,** Bangalore (Software Engineer)

Feb 2005-May 2006

Worked as a Developer for the SDC Securities team.

Accomplishments:

- Designed and developed a number of **securities data feeds** (information related to M&A, New Issues, etc.) containing huge amounts of data using a combination of **PL/SQL**, **Perl** and **shell scripts** for various high profile Investment Banks and Financial firms worldwide.
- Enhanced and maintained the backend modules using **C.** The backend modules contain the core business rules which are applied to the raw data received from the data entry and incoming data feeds.

# **EDUCATION**

- Bachelor of Engineering, Computer Science (67%): 2000-2004

  Dayananda Sagar College of Engineering, Bangalore, affiliated to Visvesvaraya Technological University (VTU), Belgaum
- Diploma, Computer Science and Engineering (64.6%): 1997-2000 K.I.E.T. Polytechnic, Bangalore, affiliated to Department of Technical Education, Govt. of Karnataka

### MISCELLANEOUS ACHIEVEMENTS

- Microsoft Hackathon 2021 Participant.
- Affirmed Spot Awards for various contributions Jan 2020, Jul 2020, Oct 2020, Jan 2021, and Jul 2021.
- Sandvine 2018 Hackathon Winner.
- Sandvine iPerfRobo Award for contributions to the PerfRobo framework development Mar 2019.
- Oracle Special Recognition Award for various contributions Sep 2015.
- Thomson Reuters Spot Awards for various contributions to the Global Turnkey Systems Mar 2009 and Aug 2009.
- Hewlett-Packard e-Award for contribution to MS SPI for Exchange 2007 Jun 2007

## **REFERENCES**

- Suneel Shankar, Principal Engineer, Sandvine, Kitchener, Canada [suneels@gmail.com]
- Venkat Viswanathan, Senior Technical Architect, Salesforce.com, Philadelphia, USA [ramanan.venkat.v@gmail.com]