

Rajendra Singh

(Software Development Engineer)

13.5+ years of industry experience in analysis, design, and development of s/w applications. Expertise in designing, developing, debugging, integrating, and releasing software.

Bangalore, India 

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PROFESSIONAL PROFILE

- Experience in developing **windows applications** using **C++/VC++/Win32/WTL**.
- Strong knowledge of **C++11/14/17/20** and **OOPS Concepts**.
- Proficient in **COM, MFC, Python, NSIS** scripts and TCP/IP/HTTP protocols.
- Experienced with DevOps tools and practices including Git, Jenkins, CI pipeline, Unit test automation.
- Responsible for designing, developing, integrating, and making the release.
- **Have worked as Project Coordinator for 3 months at Samsung Electronics, Suwon, South Korea.**
- **Active open-source contributor** and the 2nd highest contributor for **Notepad++**.

CAREER SYNOPSIS

Company	Designation	Period
Zscaler Softech India Pvt Ltd, Bangalore	Senior Staff Engineer	Jul 2023 - Present
McAfee Software India Pvt Ltd, Bangalore	Software Engineer	Dec 2019 - Jul 2023
HP Inc., Bangalore <i>Samsung R&D Institute India, Bangalore (Dec 2013 - Oct 2017)</i>	Software Designer <i>(Technical Lead)</i>	Dec 2013 - Dec 2019
Honeywell Technology Solutions Lab, Bangalore	Software Engineer	Apr 2013 - Aug 2013
TRX Technologies India Pvt Ltd, Bangalore	Software Engineer	Dec 2010 - Apr 2013

EDUCATIONAL DETAILS

Examination	Year	University/Board	Percentage
BTech in Computer Engineering	2007-2010	Rajasthan Technical University, Kota	70.73% (Honors)
Polytechnic Diploma in Electronics & Communication Engineering	2003-2006	Board of Technical Education, Rajasthan	68.89%
Senior Secondary School – (12 th)	2003	Board of Secondary Education, Rajasthan	72.92%
Secondary School – (10 th)	2001	Board of Secondary Education, Rajasthan	77.17%

TECHNICAL PROFILE

Skills	Tool	OS
Programming : C, C++ Technologies : Win32, WTL, STL, MFC, COM Scripting : NSIS (Installer script), Python Database : MySQL, MongoDB, sqlite3 Web : HTML, PHP, CSS, JavaScript, NodeJS and WAMP	<ul style="list-style-type: none"> • Visual Studio • CC, CQ, SVN, Git, Jira, Jenkins, Confluence • Wire Shark, Mib Browser, Bus Hound 	<ul style="list-style-type: none"> • Windows (XP/7/8/10/11)

PROJECT DETAILS

Zscaler, Bangalore

Roles and Responsibilities:

- Analysis and design for new requirements.
- Cross platform feature implementation.
- Work with tech support team to handle customer issues/escalations.
- Unit testing, bug fixing and code review of the developed module.
- Optimizing the code and improving code/build infrastructure.
- Mentor team members and work closely with other stakeholders such as PM, CI, cloud, CST etc.

1 Zscaler Client Connector

Technologies: C++, C#, Python, cloud

Zscaler client connector is a multi-platform (Windows/Mac/iOS/Linux) application designed to provide secure and reliable access to the Zscaler cloud security platform. It provides users with secure access to corporate resources, applications, and the internet while ensuring compliance with security policies.

McAfee, Bangalore

Roles and Responsibilities:

- Analysis and design for new requirements.
- Feature implementation for scan modules/engine.
- Handle customer escalation with fast pace.
- Unit testing, bug fixing and code review of the developed module.

1 McAfee Real Protect

Technologies: C++, Python, cloud, sqlite3

The Real Protect scanner inspects suspicious files and activities on client systems to detect malicious patterns using machine-learning techniques. The scanner uses this information to detect zero-day malware.

HP Inc., Bangalore

Roles and Responsibilities:

- Interacting with stockholders (overseas team, f/w, tech marketing) for requirement gathering.
- Requirement grooming and preparing the RQ document.
- Participate in release and sprint planning.
- Design and development of the project.
- Handling and mentoring a team of 4 developers.
- Unit testing and bug fixing of the developed module.

1 HP Universal Printer Driver

Technologies: Win32, C++, SNMP, WSD, USB, HTTP, TCP/IP

An HP flagship product, HP Universal Printer Driver (UPD) supports all printer families on Windows OS. Utilizing Windows V3 printer driver architecture, it allows users to connect printers via USB, network (both Standard TCP/IP and WSD), and point-and-print.

2 Status Notification Panel

Technologies: Win32, C++, SNMP, WSD, USB, HTTP, TCP/IP

A standalone Windows application that provides status updates for printers and print jobs. SNP is automatically triggered when a print job is initiated on any HP UPD print queue and can also be accessed manually via program shortcuts or the system tray icon.

3 Tools

Technologies: Win32, C++, NSIS Scripts, Batch scripts

Develop and maintain tools like DDU (Driver Deployment Utility), DCU (Driver Configuration Utility), etc. for easy deployment. Also, develop in-house tools to improve and speed up the dev process.

4 Intranet Web Portal

Technologies: HTML, CSS, bootstrap, JavaScript, NodeJS, MongoDB

Developed role-based web portal for internal use. This portal is used to submit paper, IP, hackathon.

Samsung R&D Institute India, Bangalore

Roles and Responsibilities:

- Collaboration with stakeholders (firmware, HQ) to understand new features and hardware specifications for upcoming printer families/series.
- Updating Software Requirements Specifications (SRS) based on new requirements.
- Design and development of new modules.
- Conduct unit testing, bug fixing, and ensured compatibility with both legacy and new products.

1 Easy Driver Update

Technologies: WTL, C++, SNMP, HTTP, TCP/IP

EDU (Easy Driver Update), a Windows application to update printer drivers from a network printer, featuring periodic update checks via Windows Task Scheduler.

2 Lite Status Monitor

Technologies: WTL, C++, SNMP, HTTP, TCP/IP, WSD, USB

LiteSM (Lite Status Monitor), a critical printer driver component that provides status updates for printers and print jobs across USB and network environments. It directly interacts with FW (at low level) and provides a user-friendly status. Features include error notifications, troubleshooting guides, and web-based user guide access.

3 Tools

Technologies: WTL, C++, NSIS scripts, Batch Scripts

Developed and maintained various tools, including EDU packaging utility, patches, OCR wrapper, OCR test tool, and in-house tools such as "Office Time Monitor," "RC Updater," and "String Merger".

TRX Technologies, Bangalore

Roles and Responsibilities:

- Collaboration with clients to gather and refine requirements.
- Create Functional Requirements Document (FRD) and Software Requirements Specification (SRS) docs.
- Design and development of projects, including writing scripts within the CORREX platform.
- Unit testing and resolving bugs of the developed module.
- Participating in User Acceptance Testing (UAT) to address issues and ensure functionality.
- Troubleshooting the production issues with minimal turnaround time (TAT).

1 Online Reservation Setup (Amex, Australia)

Technologies: C++, Oracle 9i and CORREX (On Galileo GDS)

Online Reservation Setup automates e-ticketing for online PNRs, including ticket status checks, fare validation, and MCO exchanges. It manages error logging and reporting for agent review. Further, it sends ticketing confirmations to travelers and updates client reporting databases.

2 Schedule Change and Refund (Despegar, US)

Technologies: C++, Oracle 9i and CORREX (On SABRE GDS)

It automates flight schedule changes and notifications for travelers. It identifies and processes schedule changes in ticketed PNRs, handles minor changes automatically and routes major changes for agent review. It sends email notifications to travelers for minor changes and informs both travelers and agencies for major changes.

ACHIEVEMENTS

- Volunteered at **CppCon 2020**.
- Organized hackathon (Tattvam) event in HP. I designed and developed an internal portal for this event.
- Awarded **Advanced Level Software Certificate** at Samsung India R&D Institute in 2016.
- Twice awarded Employee of the Month at Samsung (first was within three months of joining).
- Recognized as a star performer (thrice) at TRX Technologies in two years.
- Received Best Performer award for optimizing machine cycle time at Maruti Suzuki India Limited, Gurgaon.
- Gold & Silver Medalist in 100mtr & 400mtr race at state-level college competition.