

Ritesh Talreja

Los Angeles, California | <https://ritesht.com> | <linkedin.com/in/riteshtalreja/> | riteshtch@gmail.com | 415-909-0560

EDUCATION

University of Southern California (Master of Science, Computer Science + Networking) Aug 2019—Present

Coursework: Algorithm Design, Advanced OS, Web Technologies, Computer Networking & Communications, Security Systems

University of Mumbai (Bachelor of Engineering, Computer Engineering) May 2012—May 2015

Coursework: OOP (Java), Data Structures, Systems Engineering & Compiler Construction, Data Warehouse & Mining, C Programming

TECHNICAL SKILLS

Languages: Python, Java (EE and SE), JavaScript, TypeScript, SQL, Unix Shell Scripting, HTML, CSS, C
Tools: Kubernetes, Docker, Git, Selenium, Wireshark, xFittesse TDD, Jenkins, Pentaho ETL, Eclipse, IntelliJ
Frameworks: MEAN, MERN, Spring, Hibernate, NodeMCU, Android SDK, jQuery, Bootstrap, LAMP
Platforms: Google Cloud, Linux, TCP/IP Protocol Suite, Raspberry Pi, Arduino/AVR, Espressif
Databases: MySQL, MongoDB, Oracle, PostgreSQL (and PostGIS Spatial)

WORK EXPERIENCE

Nokia, Mountain View, CA May 2021—Present

SDN and Software Automation Engineer Co-op, Data Center Network Infrastructure (Python, Kubernetes, Docker, React, GPT-3)

- Developed custom control loop to maintain desired state of K8s cluster with multiple VMs and SR-Linux Routers. In addition, developed a web portal with in-browser console and drag drop functionality to configure and auto-deploy a given Clos topology.
- Contributed towards K8s YAML generation with GPT-3's NLP for predefined scenarios of Telco & Web-scale DC cloud topologies.

University of Southern California, LA, CA May 2020—Present

CSCI 585 Database Systems Lead Course Producer (DBMS + PostGIS)

Parallel Agile Inc., LA, CA Jan 2020—Present

USC Directed Research Full Stack Software Developer (Scala, Flutter, MERN (TS), MEAN(TS), React-Native)

- Automated Code generation: writing code to generate code from UML diagrams for: REST APIs, Multiple SQL & NoSQL DBs with ORMs and multiple client-side UI **enabling parallel development and slashing full-stack development time and effort by >50%**

Unify IoT Technologies, Mumbai Jun 2018—May 2019

Full Stack, Cloud & IoT Software Engineer (Google Cloud, NodeMCU Lua, AVR, Android SDK, IPFS)

- Researched and implemented Blockchain PoC for IoT to eliminate cloud middleman using IPFS saving recurring cloud costs.
- Developed [Smart WiFi Socket](#) and [Smart Lid](#) (Water Tank Level Monitor) with cloud-based remote monitoring and control.

JP Morgan Chase & Co., Mumbai Jul 2015—May 2018

Technology Analyst to Full Stack Software Engineer (Java EE: Spring, Hibernate, Oracle, Autosys, Pentaho ETL, xFittesse TDD)

- Automated data flow from many front office market-facing systems for scheduled report generation and submission to financial regulators freeing up financial analyst's manual MS-Excel work of report building.**
- Carried out every phase of SDLC in collaboration with global teams of business, compliance, central banks and regulators.

Volunteered for Force for Good Team (JPMC's Social welfare program for Pratham NGO) Jul 2015—Jul 2016

- Migrated Salesforce OLTP DB to Azure SQL DB using Pentaho ETL implementing PowerBI multidimensional OLAP cube reports on top of it. Reports helped higher management to govern 20+ nationwide education centres for underprivileged children and gain valuable insights using Analytics and OLAP cube functions such as aggregation, slicing/dicing, roll-up, drill-down etc.

AWARDS

\$5000 [Scholarship](#) by USC Viterbi Jan 2020

JP Morgan Chase Tech Savvy [Award](#) Jul 2015

[Ranked 1st](#) in ALL 3 years of Diploma in Computer Technology branch May 2009—May 2012

LEADERSHIP AND INVOLVEMENT

Reached HALF million (and growing) number of people on [StackOverflow](#) Ongoing

Served as Junior and Senior Technical Council Officer @ Computer Society of India (CSI) May 2012—May 2014

Secured Runner up Position @ JPMC Code for Good Hackathon Jul 2014

PROJECTS

[Stock Search, Watch listing and Portfolio](#) (Angular, Express, Google App Engine) Oct 2020

[PXE N/W Boot Server](#) (Python Raspberry Pi Cluster) Apr 2015

Published Paper "[Emergence in Web-based Botnets \(Targeting Application Layer\)](#)", IJERT Apr 2014

[Experimental DDoS Botnet](#) (C#, DDNS, Android SDK, PHP, MySQL) Dec 2014

[Cricomania \[Cricket Player Auction Tracking\]](#) (Android SDK, Java: Sockets, Swing, PHP, MySQL) Mar 2014

[Automated Attendance Monitoring System](#) (Android SDK, Java: Sockets, Swing, PHP, MySQL) Mar 2014

[CSI Experience Android App](#) (Android SDK, RSS) Dec 2013

[Wireless MCQ Quiz Android App](#) (Android SDK, Java: Sockets, Swing) Apr 2013

[Sentiment Analysis using Opinion Mining](#) (Supervised Machine Learning, ASP.NET (C#), MS-SQL) Jun 2012

[RecordShot Audio and Screen Recorder](#) (Android SDK, Shell scripting) Mar 2012