

ydnt/global//global/global

pgfid11137455847714434

# Arshpreet Singh

Address: SBP COD, 1105, Chandigarh, India

📞 +91 991 5959387 • ✉ arsh840@gmail.com

🌐 [www.github.com/arshpreetsingh](https://www.github.com/arshpreetsingh)

*Avoiding complexity reduces bugs.*

Presently working as Lead Software Engineer at ITC infotech with a leading team of 4 Engineers. Responsible for handling production issues and development of the Index-Distribution ecosystem. I am actively developing and maintaining internal Python and Golang-based distributed systems that are held responsible for index-creation, data-fanout, and portfolio-generation pipelines at Blackrock. I do actively participate in solution architecture and Cloud implementation of legacy systems.

I have 6+ years of experience as a Python developer, with expertise in Golang, Latex, C/C++, and Julia, and parallelization using MPI, Green-threads, and multiple techniques using Asynchronous programming models. I have also contributed to several Open-Source projects like Tux4Kids, Kivy, Open-Street Mappings, PennyLane and Paraview.

## Employment Details

---

- **ITC Infotech** **Remote Work**  
*Lead Engineer, client: Blackrock* *April 2020–Current*  
Asynchronous Application Development using Python, Go-lang, Docker, and Kubernetes. Responsible for onboarding vendor and custom indices onto customer proprietary end-to-end investment platform. Developed and automated key business performance reports and dashboards for senior management discussion and business decision-making. Unit-testing development. Develop and implement databases, data collection systems, data analytics, and other strategies that optimize statistical efficiency and quality. Legacy code maintainer.
- **Maropost India** *January 2019– April 2020*  
*GoLang Developer, client: Multiple*  
Micro-Services Development and Deployment using Technology Stack: Go-lang, Protocol Buffers, Kafka, Docker, Kubernetes, and TimescaleDB. Responsible for managing GCP and generic infrastructure for High Availability. Replaced multiple RoR Services with GoLang to improve the efficiency of the Platform. Solely responsible to implement containerization(Docker) for multiple project pipelines.
- **Netsmartz India** *August 2017–April 2018*  
*Senior Software Engineer*  
Development and Deployment of MicroServices using Technology Stack: Python, Flask, Docker, and MySQL. Development of an in-house framework to achieve Periodic Automation Testing for the complete SDN platform. Worked on Blockchain Project using Hyperledger to build network-packet pathways for transparent and secure loop.
- **Revinfotech Ludhiana** *May 2016–August 2017*  
*Full-Stack Python. Client: Bitfinex*  
Design and development of Software Projects using Python, Django, Flask, MongoDB Active participation with clients to understand business needs and Producing end to end Solutions.

## Education and Certifications

---

### Academic Qualifications.....

- *B.Tech: Information Technology* **GNDEC - Ludhiana, Punjab, India**  
2009–2013

### Certifications.....

- **IBM - Quantum Computing Foundations**  
<https://quantum-computing.ibm.com> 2020
- **HackerRank - Rest APIs Development**  
<https://www.hackerrank.com>, 2020
- **Coursera - Julia for Scientific Programming**  
<http://coursera.com>, 2017
- **Coursera - Deep Learning Specialization**  
<http://coursera.com>, 2017
- **Pluralsight - Golang Fundamentals and Beyond**  
<https://www.pluralsight.com>, 2020
- **Pluralsight - Working with Graph Algorithms in Python**  
<https://www.pluralsight.com>, 2020
- **Pluralsight - The Challenges of Quantum Computing**  
<https://www.pluralsight.com>, 2020
- **Pluralsight - Applying Financial Risk-Modeling Techniques**  
<https://www.pluralsight.com>, 2020
- **Pluralsight - Docker and Kubernetes**  
<https://www.pluralsight.com>, 2020
- **Redhat - Fundamentals of Containers DO081X**  
<https://www.redhat.com>, 2020

### Notable Projects.....

- **Development of Index-Cache-Server using Golang "**  
This project was required to cache a certain amount of data to deliver over multiple clients and to reduce request load on the database server.
- **MSCI data pipeline development "**  
Developed index data-loader for MSCI(Morgan Stanley Capital International) responsible to handle Quality-Check and Asset-Resolution for Index-vendors.
- **Development of distributed platform for Digital Marketing Analytics "**  
Used Go-Programming language as Primary technology for the development of Platform-based on MicroServices architecture to enhance capabilities of legacy systems.
- **Neural Network based crypto trading bot**  
Bitcoin Live Trading is a Web-Based System developed to generate Buy/Sell Calls using Bitfinex and Coindesk APIs based on Predictive Results produced by Algorithm.
- **ParaView Advanced Volume Filter(Scientific Data Analysis)** Advanced Volume Filter is developed using Python as Scripting Language with support of Other Libraries like Numpy and Scipy.

## Open Source Contributions

---

- **Container-Orchestration of Quantum ML Framework** Proficient in: Python, GoLang, Julia, LaTeX, SQL, Shell-Scripts.  
Also basic ability with: Assembly, Erlang, R.
- **Pytorch Plugin development for Quantum-Computing Platform** MicroServices, Docker, Container-Orchestration, Cloud-Infrastructure, Data-Visualizations.
- **Tuxblocks** Machine Learning and Data-Science, System-architecture, DBMS.
- **Open Street Mapping** Good presentation skills, Works well in a team.
- **Text-to-mp3 Android implementation** Can write well organised and structured reports.
- **Traefic Brand Ambassador** Can write well organised and structured reports.

## Technical and Personal skills

---

- **Programming Languages:** Proficient in: Python, GoLang, Julia, LaTeX, SQL, Shell-Scripts.  
Also basic ability with: Assembly, Erlang, R.
- **Industry Software Skills:** MicroServices, Docker, Container-Orchestration, Cloud-Infrastructure, Data-Visualizations.
- **Other Software Skills:** Machine Learning and Data-Science, System-architecture, DBMS.
- **General Business Skills:** Good presentation skills, Works well in a team.
- **Other:** Can write well organised and structured reports.