

# Nishchay Parashar

RESEARCH ENGINEER · COMPUTER SCIENTIST · SOFTWARE DEVELOPER · SYSTEMS ENGINEER

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## Education

### Brown University

MASTER'S IN COMPUTER SCIENCE

Providence, RI, USA

Sep. 2022 - May 2024 (expected)

- Systems pathway specialization.
- Fall 22 courses: Computer Systems(CSCI1330) and Design and Analysis of Algorithms(CSCI1570).

### Manipal Institute of Technology

B.TECH. IN COMPUTER SCIENCE AND ENGINEERING (MINOR: BIG DATA)

Manipal, India

Aug. 2016 - Aug. 2020

- GPA: 3.96/4.0 (WES evaluation). GPA: 8.69/10.0.
- Lead a community of 1500+ students as General Secretary of Computer Science club - university's largest technical society.
- Recognized by GitHub Education as one in less than 250 global Campus Experts on the basis of community building, management and software development skills.

## Work Experience

### Samsung Research - Samsung Semiconductor India Research

SENIOR ENGINEER

Bangalore, India

Aug. 2020 - Jul. 2022

- Developed multiple microservices (infra provisioning, observability, notification management) essential to department's flagship automation platform. Ensured end-to-end delivery and 100% up-time.
- Built distributed log pipelines and complementary in-house analytics engine to tackle Software Quality Assurance problem statements. Worked extensively on search platform Elastic stack and solving distributed-systems performance optimization problems.
- Held primary ownership of Analytics & ML branch of service - developed false positive detection (to identify avg 200/100k test cases per release), failure root cause analysis and failure similarity search. Facilitated improvements in test benches of 7+ memory products.
- Presented internal technical paper as 1st author on 'Failure Analysis, Triaging and Test Optimization using Data Science and Analytics' at Samsung India Research TechCon 2020, regularly submitted papers and conducted technical demos at internal research seminars.

SOFTWARE DEVELOPER INTERN

Jan. 2020 - Jul. 2020

- Part of the team developing Composable Infrastructure and Hybrid Cloud solution to be used by Samsung R&D centers globally.
- Contributed with multiple research assignments, experiments and 2000+ lines of code, working extensively on the forward-looking concept of Composable Infrastructure and employed established open-source tools like OpenStack, Puppet-Razor, Juju and Django.

### Physiz AgTech

SOFTWARE DEVELOPER

Mumbai, India

May 2019 - Jul. 2019

- Worked on backend development for company's core product, implemented critical features and developed 30+ API routes to enable team to stay on track for global release.
- Designed and built an automated testing solution from scratch using Mocha and Chai.js. Increased code coverage from 0% to over 60%.
- Took on DevOps responsibility to set up CI/CD, Kong API Gateway and manage IoT devices over the cloud through Balena.

## Projects & Skills

### DAMN - SSH Keys Distribution and Management Network

SKILLS: GOLANG, GIT, DATABASE MANAGEMENT, SERVER MANAGEMENT, SHELL SCRIPTING, OAUTH, API DEVELOPMENT, ORM

- Developed web application for securely requesting, granting and revoking access to servers on the go by managing SSH keys of all node servers through a central server with the provided web portal.
- Engineered backend using Golang while working with various web APIs, OAuth protocol, scripting and databases technologies.

### Golang Compiler

SKILLS: COMPILER DESIGN, DATA STRUCTURES, ALGORITHMS, C/C++, FLEX, BISON

- Developed a partial compiler(lexical analyzer) with error reporting and error recovery for Go(Golang) programming language.
- Created an additional web application for end-to-end demo of the compiler.

### Task Queues Implementation

SKILLS: PYTHON, FLASK, RABBITMQ, CELERY, SQL, DOCKER, DOCKER-COMPOSE

- Since uploading large data sets handicaps the server to process further requests, used Celery to implement task queues with RabbitMQ as the broker so as to allow the uploading of data sets to be an asynchronous task with the option to check the status and revoke task.

### FIFAWC - CLI App

SKILLS: GOLANG, BASH, API INTEGRATION

- Developed a Command Line Interface (CLI) app using Golang and web APIs to track the FIFA World Cup 2018 by getting live scores, fixtures, team details and other statistics right from the terminal.