Mehul Shekhar Mukherjee

Software Engineer **|** Penn State University Graduate

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Academic Qualifications

Penn State University

Master of Engineering in Computer Science   *August 2022*

Coursework: Algorithm Design and Analysis, Operating Systems, Database Management Systems, Computer Security.

Manipal Institute of Technology

B.Tech. in Information Technology   *April 2019*

Coursework: Data Structures, Analysis and Design of Algorithms, Web Technologies, Object Oriented Programming, Software Engineering.

Work Experience   31 Months

Lumen Technologies (formerly CenturyLink), Software Engineer   *August 2019 to June 2021*

Contributed to an agile team as a **full-stack developer**

- Developed REST services with spring
- Used JAVA Mockito for code coverage
- Designed and developed the front-end architecture of our ordering platform using Angular web framework
- Developed complex SQL queries
- Programmed and designed the business process management activities of our tollfree ordering workflow using JAVA Activiti
- As an individual contributor, I closely worked with business analysts for requirement gathering, break up and refinement
- As part of the tollfree team, I was involved in scrum activities such as sprint grooming and planning

Samsung R&D Institute Bangalore, Software Engineer (intern)   *January 2019 to June 2019*

- Developed an android app to detect objects in a live video stream using a pre-built YOLO classifier
- Integrated Samsung's voice assistant, Bixby, with the app. This provided voice command functionality
- The app detected only those objects which were given in a voice command
- Underwent training in JAVA

Deloitte India, Software Engineer (intern)   *May 2018 to July 2018*

- Developed SQL queries
- Developed NoSQL queries for a MongoDB database

Leveraged Knowledge: Web Technologies: Angular, HTML, CSS, JavaScript, TypeScript. **Concepts:** MVC, REST API, JSON. **Tools:** GIT, JIRA, Eclipse, SQL Developer. **Programming-Languages:** Java. **Database:** SQL, MongoDB

Projects

Personal Website: http://mehulmukherjee.github.io/My-Portfolio/ (for additional information and projects)

- **Thread Migrator:** Migrated a pthread from machine A to another machine B. The task that a pthread was performing in machine A, is resumed in machine B when a pthread is migrated from A to B.
- **Distributed Mutex Lock:** Machines with different IP addresses, compete for a lock for a common critical section by following Ricart-Agarwala distributed mutex lock algorithm. Machines communicate with each other using gRPC.
- **Information Retrieval System:** Implemented a record-level inverted index with a user interface for searching a word or a sentence in a set of documents. When searching a word or a phrase, the software returns the document links which contains the search key.

Leveraged Knowledge: Web Technologies: React**,** Flask, HTML, CSS**. Programming-Languages:** Python, C, C++