

Payal Mehta

<https://www.linkedin.com/in/payal-mehta95>

<https://github.com/PayalSainathMehta>

Email: psmehta@cs.stonybrook.edu

Mobile: (631)215-8072

<https://payalsainathmehta.github.io>

EDUCATION

Stony Brook University

NY, USA

Master of Science in Computer Science; CGPA: 3.48/4.0

Aug 2019 - Dec 2020

Relevant Coursework: Natural Language Processing, Data Science, Probability and Statistics for Data Scientists, Analysis of Algorithms, Database Systems, Data Visualization

K.J. Somaiya College of Engineering

Mumbai, India

Bachelor of Technology in Computer Engineering; CGPA: 9.13/10.0

Aug 2012 - May 2016

Relevant Coursework: Data Structures, Big Data Analytics, Theoretical Computer Science, Neural Networks, Software Project Management

(Rank 1 in department of Computer Engineering - **Ratan Tata Award Winner for outstanding academics**)

EXPERIENCE

Amazon

Seattle, USA

Software Engineer Intern

June 2020 - Aug 2020

- Full Stack Development for Amazon Cornerstone - Prepared the design and produced a front-end web portal and a back-end command-line tool to provide real time view of critical data of the AdSearch engine's state and executions that are beneficial to the team in maintaining the service. **This information helped speed up day-to-day tasks by 60% on an average.** The tool can be wrapped into a DevX component to provide owners, insights on performance and metadata of ad documents.

Java, Javascript, React js, Ruby, AWS(VPC, API Gateway, S3, Lambda), Docker, Allegiance, Mockito

Barclays

Pune, India

Software Engineer

Aug 2016 - Jun 2019

- Completely established the bank's payment pre-processing and message routing system which helped accelerate the payment process, **increasing the throughput by 55%.**
- Lead the creation of a testing automation framework for multiple enhancements and bug fixes using JUnit and Arquillian **resulting in a drastic decline in production issues, close to 40%.**
- Optimized SQL query, leading to performance optimization bringing down execution time from 5 hours to 25 minutes on the Static Sanctions Screening PR which involved analysing about 3 million Oracle db records - **Received Barclays Global Recognition award for excellence.**
- Created a System Integration Catalog consisting of 700 different connections to/from the payment engine leading to a reduction in requirement to workflow mapping time by 45% - **Received Barclays SPOT award for entry level individual work in designing a high level solution for the bank's High Value Payments space.**

Core Java, Java EE, Enterprise Java Beans, Jboss 6.0, JUnit, Arquillian

PROJECTS

- **"Password-less Authentication Model"**: *Awarded Best Security Hack, The Future of Safety Hack @CEWIT Hackathon 2020.* Developed a password less ultrasonic authentication model for data transfer over sound waves.
Link:- <https://devpost.com/software/passwordless-ultrasonic-auth>
- **"Low Vision E-reader"**: Implemented a software to parse chat conversations in websites like Stack overflow to display a directed graph for people with low vision, helping them read better at a lower market cost.
Python, Flask
- **"Fetal Heart Rate Diagnosis"**: Developing a decision-learning tool which reads health signals from pregnant mothers and their fetus to determine whether C-section is necessary for a delivery. This tool should reduce pregnancy related fatality risks by 43%
Python, Flask, Plotly, Postgres, SQL
- **"Covid'19 Dashboard"**: Built an interactive Dashboard with graphs to assess impact of Novel Coronavirus on America specifically using Modern React Development with React and React Context API for State Management.
React, Javascript, CSS, Styled Components v4, D3 js, Lodash : Functional Programming
- **"Learning Management System"**: Created an e-commerce website equipped with a recommendation engine based on Apache Hadoop to generate course recommendations for students to facilitate on-the-go one stop shop for learning. Hosted on Amazon Web Services(AWS). *Paper accepted in IJCA: <https://www.ijcaonline.org/archives/volume140/number10/24627-2016909449>*
PHP, CodeIgniter, HTML, CSS, Javascript, Hadoop

TECHNICAL SKILLS

- **Languages:** Java (4 years), Python (2 years), SQL (3 years), C (1 year), C++ (1 year)
- **Web Technologies:** HTML (4 years), CSS (4 years), Javascript - React js, D3.js (2 years), PHP (2 years)
- **Tools, Technologies & Frameworks:** JUnit, Mockito, CodeIgniter, Apache Hadoop, Bootstrap, Tensorflow, AWS, Amazon EC2, Amazon Lambda S3, API Gateway, Git, Oracle 11g, My SQL, Datalog, PostgreSQL, IntelliJ, NetBeans, Eclipse, Maven, Gradle, Jboss 6.0, WildFly, Jira, Latex