

# Shashwat Dalal

## SENIOR MACHINE LEARNING ENGINEER, QUANTUMBLACK COMPUTING MENG, IMPERIAL COLLEGE LONDON

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shashwatdalal.github.io

## WORK EXPERIENCE

### QUANTUMBLACK (A MCKINSEY COMPANY) | SENIOR MACHINE LEARNING ENGINEER

September 2020 – Current | London, United Kingdom

- Lead critical workstreams in a large pharmaceutical live clinical trial optimization engagement.
- Built a feature engineering framework that unified historical and live features. The framework reduced two weeks of work for engagements that required online features.
- Built a modular automated profiling and reporting tool that has been deployed on client engagements. The tool helped bring attention to serious data quality issues on the first day of the project.
- Reduced the pipeline runtime by 40% for a major asset (Deployed 20+ times on a client engagement).

### BLOOMBERG | SOFTWARE ENGINEERING INDUSTRIAL PLACEMENT

April 2019 – September 2019 | London, United Kingdom

Containerizing Builds Build Solutions London Team

- Maintained **BuildStream**, an open source build and integration tool written in **Python**.
- Wrote a plugin to automate the creation of reproducible and layered **Docker** images.  
*Report:* [https://shashwatdalal.github.io/files/placement\\_report.pdf](https://shashwatdalal.github.io/files/placement_report.pdf)  
*Code:* <https://gitlab.com/BuildStream/bst-plugins-container>

### BARCLAYS INVESTMENT BANK | SUMMER TECHNOLOGY ANALYST

June 2018 – September 2018 | London, United Kingdom

## EDUCATION

### IMPERIAL COLLEGE LONDON | COMPUTING MENG. (GRADUATED 1ST CLASS)

2016 - 2020 | London, United Kingdom

Academic Projects

- **Effect of Non-Identically Distributed Data on Federated Learning for Next-Word Prediction:** Final year project.  
*Report:* [https://shashwatdalal.github.io/files/fl\\_fyp.pdf](https://shashwatdalal.github.io/files/fl_fyp.pdf)  
*Slides:* <https://bit.ly/3bpAU8g>
- **Aspect-based Sentiment Analysis with Goldman Sachs:** In a team of six, built an aspect-based sentiment analysis engine for the asset management engineering team. Back-end written in **Python** and database layer used **MySQL**, and **Microsoft Cosmos**.  
*Report:* [https://shashwatdalal.github.io/files/Software\\_Engineering\\_Project\\_Report.pdf](https://shashwatdalal.github.io/files/Software_Engineering_Project_Report.pdf)  
*Code:* <https://dev.azure.com/vapesoc/362%20Software%20Engineering%20Project/>
- **MatchUps:** In a team of four, created a web-application where teams can register and find other teams to play recreational sports with based on proximity, rank, and availability. Project was thin-sliced, hence all developers were full-stack. Front-end was written in **React**, the back-end was written in **GoLang**, **MySQL** served as the database layer, and DevOps tools used for the project include: **Docker**, **Jenkins**, **AWS**. Additionally, took lead for **UX testing**.  
*Pitch + Code:* <https://github.com/shashwatdalal/MatchUps>

Extracurricular Activities

- **President of Imperial College London Data Science Society:** Lead a team of 15 to ensure UK's largest student data-science society runs smoothly. Assist with growth strategy, corporate sponsorship, budgeting, union-relations, and talent development. Used **GitHub Actions** and **AWS** to automate (i) website deployments (ii) moving members on to our mailing list. *Code:* [https://github.com/shashwatdalal/new\\_icdss\\_members](https://github.com/shashwatdalal/new_icdss_members)

## SKILL-SET SUMMARIZED

### TECHNICAL SKILLS

Java • Haskell • Python • C • SQL • GoLang  
JavaScript • AWS • Docker • Jenkins  
Data Science with Python • Linux •  $\LaTeX$

### LANGUAGES

English (Written/Spoken Fluency) • Gujarati (Spoken Fluency) • Japanese (Written/Spoken Conversational) • Spanish (Written/Spoken Conversational) • Hindi (Spoken Conversational)