Pulkit Arora

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Education

University of California, San Diego **September 2021 - June 2023 (***expected)*
MS in Computer Science & Engineering
- GPA 3.90/4.00
- Relevant Coursework - Supervised ML algorithms, Convex Optimization, Probabilistic Learning, Reinforcement Learning, Virtualization techniques, Serverless Computing, Containers, Kubernetes, Statistical Methods, Design and Analysis of Algorithms, Algorithms in Computational Biology

Punjab Engineering College, Chandigarh **July 2013 - May 2017**
BS in Computer Science & Engineering
- GPA 9.7/10, *Gold medal* for graduating top of the class and best academic performance
- Co-authored a paper titled "Classification of locomotive disorders based on stance parameters"

Experience

Goldman Sachs, Bengaluru **November 2019 - August 2021**
Associate

- Implemented a producer-consumer architecture to extract client valuations for reporting 3 times the existing trade volumes
- Resulting process was 20% faster and horizontally scalable, allowing the team to onboard more clients to the platform and prevent report delivery SLA breaches
- Programmed Rest APIs in Java allowing the reporting data to be consumed for generating client reports instead of SQLite files, eradicating FTP errors that caused 30% of SLA breaches
- Designed an anomaly detection system to escalate trader/systematic errors in a global trading workflow that handles trades worth >$1B per month on average
- The above system consisted of a Python application that ran checks and balances on the data in 3 different systems involved in the above workflow

American Express, Gurgaon **July 2017 - November 2019**
Engineer II

- Developed Rest APIs in Java using Spring framework
- These APIs queried Redis, and then HBase in case of a cache miss. They were also used to persist data to HBase that could scale to millions of records
- Above REST endpoints served as the data source for newly constructed visualization dashboards in the company's Risk Management Big Data platform, enabling risk managers to better visualize alerts, observe seasonal trends and resolve issues upto 50% faster

Internships

American Express, Gurgaon **January 2016 - June 2016**
Data Engineering Intern

- Designed a process to identify factoring transactions from millions of transactions stored in Teradata tables
- These transactions were leveraged by the authentication system to decline credit card transactions in real time, saving roughly $1M annually in fraudulent transactions

Skills

- **Languages** - Java (Object Oriented Design, Unit Testing, Multi-threading, Spring framework, Dependency Injection, Design Patterns), Python (Django and Flask frameworks, Numpy, scikit-learn, Jupyter notebooks), C/C++
- **Miscellaneous -** HBase, MongoDB, Redis, MySQL, Git, CVS, Hadoop, Hive, Teradata, Big Data, Spark, Docker, Kubernetes, Supervised ML, Serverless Computing