

GOURAV AGRAWAL

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EDUCATION

Arizona State University (ASU) | Master's in Computer Science | Tempe, AZ | 3.78/4 *May 2021 (Expected)*
Related Courses: Database Management System Implementation, Data Processing at Scale, Foundations of Algorithms
Vellore Institute of Technology | Bachelor's in Computer Science | India | 8.55/10 *May 2017*

TECHNICAL SKILLS

Java, Python, JavaScript, **AWS (Certified Developer Associate)**, Node.js, HTML, CSS, SQL, Angular, ReactJS, Redux, Spring, Apache Ignite, Apache Spark, REST APIs, GraphQL, Git, MySQL, PostgreSQL, MongoDB, Terraform, Linux, Jenkins, Sonar, JIRA, Agile

WORK EXPERIENCE

University Technology Office | Data Analyst | Arizona State University *Nov 2019 – Present*

- Working alongside the Data Governance team to help build ASU data catalog platform in **Collibra**.
- Developed automated jobs for ingesting metadata from Amazon **Redshift**, **Aurora**, **Oracle** and **S3** data lake using **Python**.
- Used **terraform** scripts (Infrastructure as Code tool) to automate the build and deployment process of AWS **Lambda** functions.
- Deployed a **serverless** web app using AWS **Amplify** and **React** to provide an interface for interactions with the S3 bucket.

BlackRock | Software Engineer | Gurgaon, India *Aug 2017 – Jul 2019*

Snapshot Publisher

- Built a web application from ground up using **Angular 6**, **Java** and **Spring** which replaced 2 legacy production applications.
- Researched and Implemented **Apache Ignite** as a distributed in-memory cache, leading to more than 10x the upsurge in performance and speed.
- Integrated Ignite with the **ag-grid** server-side row model to perform dynamic on-the-fly filtering, sorting and joins operations.

Snapshot Cache

- Deployed **RESTful** web services using **Spring Boot** and oversaw the load testing and performance tuning for the API.
- Reduced the response time of API from 8-35 secs to 0-3 secs by using composite indexing and SQL query optimization techniques.

Aladdin for Corporate Treasury (aCT)

- Fast-tracked the front-end development of aCT, meant to replace the 3rd party tool, in turn saving approx. \$1 million yearly.
- Designed **wireframes** and released multiple screens and features like bulk file upload and admin dashboard as a part of it.

Snapshot Controller

- Automated the manual efforts of deploying financial metrics reports by developing a **Spring Integration** based application, reducing 45-man hours of work monthly. Further, engineered the application to work as a generic task dispatcher framework.
- Awarded 'Outstanding Performer' (<5%) consecutively for two years at BlackRock.

BlackRock | Software Engineer Intern | Gurgaon, India *Jan 2017 – Jul 2017*

- Developed reusable web components using Angular along with **Redux** and Spring MVC and used **Webpack** to bundle files.
- Integrated **HighCharts** and **D3.js** interactive visualizations for displaying analytics/insights in the portfolio performance.
- Set up a **monorepo** and enforced **GitFlow Workflow** to unify **Jenkins** build for all app-owners.
- Ensured more than 90% code coverage for both frontend and backend using **Jasmine/Karma** and **JUnit**.
- Runner-up (out of 20 teams) in a hackathon, for developing a game which makes learning finance simple and fun.

HACKATHON & ACADEMIC PROJECTS

Traffic Flow Prediction | Statistical Machine Learning | ASU *Fall' 2019*

- Prototyped a 2-step short-term traffic flow prediction model using **deep neural networks** like Stacked Auto Encoders and LSTM.
- Collaborated with 2 others to extend the model to withstand shocks like accidents, lane closure, weather etc.

The Pac-Man Projects | Intro to Artificial Intelligence | ASU *Fall' 2019*

- Formulated array of **AI** techniques including informed state-space search, probabilistic inference, reinforcement learning, perceptron algorithm and neural network models in the multi-agent Pacman world. Evaluated with a 100% grade.

Meal prediction using CGM dataset | Data Mining | ASU *Fall' 2019*

- Developed a model to predict meal intake of a type-1 diabetic patient using continuous blood glucose level monitor data.
- Extracted meaningful features from the time-series data and achieved an accuracy of 77% using **supervised clustering** technique.

Aladdin Briefcase – Global Hackathon, BlackRock *April 2019*

- Asia-Pacific finalist (out of more than 100 teams) for automating and digitalizing the client reporting process for Institutional clients.