

# Kawalpreet (Kawal) Deol

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## Summary

A University of Waterloo Computer Engineering graduate, bringing a rich background with two years of work experience. Certified as an Azure Data Engineer Associate. Completed multiple projects, showcasing a diverse knowledge base. Renowned for my rapid learning abilities, I adeptly navigate complex technical landscapes, demonstrating a keen aptitude for both data and software engineering.

## Skills

- Python | C++ | JavaScript | React | SQL | NoSQL | MySQL | SQL Server | Azure | GCP | S3 | Git | Distributed Systems | OOP | REST API

## Education

### Bachelor of Applied Science

University of Waterloo

Waterloo, ON, CAN 09/2017 – 06/2023

- Major in Computer Engineering, Honours

## Work History

### Data Engineer

Tealbook

Toronto, ON, CAN 09/2022 – 12/2022

- Led a project enabling the upload of large data files to Google Cloud Storage and monitoring its data quality validation progress with real-time status updates stored on Google Datastore using React.js, Express.js and Python.
- Planned and conducted tutorial sessions, providing insights into the data quality project and the codebase for the web app.
- Debugged microservice bugs by logging data objects on Google Cloud Logging.
- Streamlined Google Sheet reviews by developing a microservice to cleanse sheet data and append results to an aggregated sheet using Python and Flask.
- Triggered the Flask microservice upon new file uploads with a Google Drive Trigger using Google Apps Scripts.

### Data Engineer

Tealbook

Toronto, ON, CAN 01/2022 – 04/2022

- Enhanced web crawlers to scrape online certification databases using Python, leveraging Scrapy and BeautifulSoup.
- Developed a script to extract JSON files from Google Cloud Storage, validating each file and logging the results using Python.
- Crafted a Python script using Pandas to cleanse JSON data, align it with a specific schema, and send the data as a spreadsheet to an ML API via a JWT authenticated request.
- Build a BERT model with data extracted from Google BigQuery, predicting Small Business certification eligibility for companies with 82% accuracy using Python in a Jupyter Notebook.

### Full-Stack Developer

PartnerStack

Toronto, ON, CAN 05/2021 – 08/2021

- Participated in a team-driven Design Sprint for the Partner Summary Page, involving goal definition, audience analysis, brainstorming, product prototyping, vendor validation, and design finalization for the first iteration.
- Utilized Test Driven Development (TDD) principles to reduce errors by building test cases in Jest that provided over 80% code coverage.

### Web Developer

Horizn

Toronto, ON, CAN 09/2020 – 12/2020

- Created site routes, relational models, migrations, seeders, and controllers to build a front-end to show user topics using React.js, Laravel, SQL, MySQL, and S3.

### PHP Developer

Venngo Inc

Toronto, ON, CAN 01/2020 – 04/2020

- Developed a module enabling vendors to visualize product data statistics, access account details, and submit forms using Vue.js, Laravel, SQL, MySQL and S3.

### IT Technical Developer

City of Toronto

Toronto, ON, CAN 05/2019 – 08/2019

- Engineered a MySQL backend using relational modelling to manage the statuses and versioning of engineering design documents.
- Enhanced an existing data packet information management website using HTML, CSS, JavaScript, PHP, PowerShell, SQL, and MySQL.

## Projects

- Personal Website:** Crafting a personalized portfolio website to showcase areas of interest, projects and an experience timeline utilizing React.js, Material UI, Firebase (Hosting, Functions, Firestore), Docker, Jenkins, Jest, and React Testing Library (11/2023 – Present)
- Stats Utils:** Developed and published a Python package on PyPi for calculating Binomial and Gaussian distributions (01/2024)
- Vehicle Telemetry Processing:** Created an ETL pipeline to process vehicle telemetry data retrieved from S3 and store the results in an Azure SQL Database using Azure Data Lake Gen2, Azure Data Factory, and Azure Functions App (10/2023)

## Certifications

- Microsoft Azure Data Engineer Associate:** Evaluates expertise in data pipelining, querying, storage, and streaming (EXP: 08/2024)