# Abhijeet Karmakar

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### **SUMMARY** \_

Detail-oriented Software Engineer with 1.5 years of experience in developing complex micro-services, web applications and data pipelines. Proficient in Python, Java, JavaScript and SQL. Proven ability to deliver solutions that create longlasting impacts. Strong problem-solving skills, excellent communication, and a collaborative team spirit. Passionate about exploring new technologies and building impactful digital solutions.

### SKILLS\_

Languages Python, Java, JavaScript, HTML, CSS, SQL

Software Django, Spring Boot, NodeJS, ReactJS, MySQL, MongoDB, Docker, AWS, Azure, Docker, Kubernetes

Agile Methodology, CI/CD, Microservices, Code Reviews, Documentation, Design Patterns, Testing (unit, Concepts

component, integration)

Collaborative, Analytical, Problem-solving, Professional, Written and Oral Communication, Attention to Soft Skills

#### EDUCATION

University of Calgary, M.Eng in Electrical and Computer Engineering | Calgary, AB GPA: 3.88 / 4.0 May 2024

#### CERTIFICATES \_

System Design, AlgoExpert Azure Data Fundamentals, Microsoft June 2024

#### EXPERIENCE \_

### **Volunteer Software Engineer,** New Idea Machine | Calgary, Alberta

July 2024 - Present

Feb 2024

- Spearheading the development of an innovative micro-learning platform tailored for the untapped energy community, fostering continuous learning and engagement.
- Leveraging NodeJS and MongoDB to create a dynamic, publicly accessible platform that invites users to discover and learn something new every day.

### **Volunteer Software Engineer,** Konnect Dating | Calgary, Alberta

June 2024 - Present

- Lead microservices development using Java Spring Boot, enhancing application scalability and maintainability.
- Engineer database designs and implement encryption to ensure optimal performance and data security.
- Deploy applications on AWS to boost performance and reliability.

### **Volunteer,** *Untapped Energy* | Calgary, Alberta

June 2024 - Present

- Organizing the high-profile Datathon event in Calgary, demonstrating exceptional teamwork and dedication.
- Developing dynamic Python notebooks and PowerBI dashboards, making complex datasets accessible and userfriendly for event participants.

# **Graduate Teaching Assistant,** *University of Calgary* | Calgary, Alberta

Jan 2024 - April 2024

- Facilitated lab discussions in Practical Data Structures and Algorithms, promoting participation and inclusivity.
- Supported student progress through effective communication and prompt responses.

### Data Engineer, Tata Consultancy Services | Ahmedabad, India

July 2021 - Dec 2022

- Automated territory assignments with batch data pipelines using Python and SQL, improving efficiency.
- Enhanced sales assignment accuracy by analyzing territory trends.
- Reduced processing time by 70% by converting Apex code for Salesforce CRM into data pipelines on Heroku Cloud.
- Enhanced team productivity by 20% by contributing to design discussions and all lifecycle stages.
- Increased decision-making efficiency by 30% by managing client data challenges.

# Software Developer, Tata Consultancy Services | Ahmedabad, India

July 2021 - Dec 2022

- Developed a secure Credit Portal SaaS for customer credit checks using Python, Django, and PostgreSQL.
- Improved project efficiency and code quality through Agile practices and peer code reviews.
- Developed and enhanced the Credit Portal SaaS, ensuring security and advanced functionality.
- Enhanced system scalability by hosting on Heroku and improved decision-making efficiency by 30%.
- Expanded the system's reach into the LATAM region, growing the user base by 20%.
- Collaborated with stakeholders to implement digital solutions and resolved 15 production issues, ensuring client success.

### Personal Shift Manager Web App

May 2024 - Present

- Creating a user-friendly platform for seamless clock-in/out and work hour tracking.
- Using ReactJS, SpringBoot, PostgreSQL and Redis for secure authentication and real-time updates,
- Aiming to deliver a robust shift management system to reduce administrative overhead and improve scheduling transparency.

# Real-Time Stock Market pipeline, Personal Project

May 2024 - Present

- Designed and implemented a data pipeline with Python and Apache Airflow.
- Developed real-time data ingestion using Google Pub/Sub. Processed data with Apache Beam for scalable handling.
- Integrated BigQuery for storing processed data, enabling high-speed querying and data analysis.
- Created Tableau dashboards for stock trend visualization.
- Technologies: Python, Apache Airflow, Google Pub/Sub, Apache Beam, Google BigQuery, Tableau

### Uber Eats menu data pipeline

May 2024 - May 2024

- Improved data processing speed by 50% with scalable pipelines on Google Cloud Platform for Uber Eats data.
- Utilized Google Cloud Storage, Airflow, and Python for data transformation.
- Increased data accessibility by 40% using Google BigQuery and Apache Superset for dashboards.
- Technologies: Google Cloud Storage, Python, SQL, Airflow, Google BigQuery, Apache Superset.

### Analytics Dashboard for Smart Parking System, Graduate Project

 $\rm Jan~2024$  - April2024

- Collaborated with a 6-member team to implement a reservation-based parking system using Python, MySQL and Django.
- Designed ETL batch data pipelines applying data modeling and data warehousing concepts for a user-friendly analytics dashboard.
- Hosted Django Rest Framework based REST APIs using AWS cloud services.

ACHIEVEMENTS \_

Best graduate project award, University of Calgary

2024