



## Michael Lee

### Data Engineer

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☎ 403-818-1310

🌐 Michael Lee

🐙 GitHub / Profile

### CERTIFICATES

- ☁ AWS Big Data Specialty
- ☁ AWS Solution Architect Associate
- ☁ AWS Developer Associate
- ☁ Azure Solution Architect Expert
- ☁ Azure DevOps Expert
- ☁ Azure Data Engineer Associate
- ☁ Azure Data Scientist Associate
- ☁ Azure Database Admin Associate
- ☁ Azure AI Engineer Associate
- ☁ Azure Administrator Associate
- ☁ Azure Developer Associate
- ☁ Azure Security Engineer Associate
- ☁ Power BI Data Analyst Associate
- ☁ Azure Cosmos DB Specialty
- ☁ Azure IoT Developer Associate
- ☁ Azure SAP Workloads Specialty
- ☁ Azure Fundamentals
- ☁ Azure Data Fundamentals
- ☁ Azure AI Fundamentals
- ⚙ APEGA Professional Engineer (#216816)

## CAREER PROFILE

As a Data & AI Engineer, I have a recent year experience at the cloud organization specialized in Microsoft Azure cloud. I also have years of developer experience, including internships. In addition, over ten years of professional experience in project management including positions of increasing responsibility in energy sector. Highly skilled in data engineering, data analytics, hybrid cloud, machine learning, software development, web programming and project management.

I am mature and self-motivated professional who meets evolving business needs through extensive experience and continuous learning in cloud technologies, data engineering and data science. I have a passion for improving work value, making things better, continuous learning technologies and collaborating with others. I am sure that I can be an asset in most situations given my hands-on experience, my ability to work well with others and a relentless completion and follow up attitude.

## EXPERIENCES

### Senior Data & AI Engineer

2020.05 ~ Present

Zenith & Company (remote)

Enrolled a Senior Data Engineer as part of the Data&AI Team and worked on cloud-based data architectures and platforms.

- ◆ Experience in Data modeling, Data warehousing, and Data operations with Data Lake, Synapse, Data Factory, Stream Analytics, Delta Lake, Cosmos DB Azure Function, Logic Apps and Databricks in Azure cloud platform
- ◆ Developing and implementing data architectures and pipelines
- ◆ Implementing ETL/ELT process for batch and streaming data
- ◆ Design, build and implement data pipelines for different data sources and destinations using Azure Data Factory and Databricks
- ◆ Developing ML/MLOps architectures to build ML models and experiments
- ◆ Worked in data an AI services and features in multiple cloud environment
- ◆ Understanding of data analytics architecture in Azure or other platforms
- ◆ Hands on experience in data ingesting, pre-processing, and migrating from on-prem, IoT Hub, Event Hub, and multiple hybrid data sources
- ◆ Understanding of big data architectures based on HDFS and Spark
- ◆ Hands-on experience in containerization and orchestration using Kubernetes with Docker engines
- ◆ Understanding of data governance concepts, lineages, and metadata management using Azure Purview
- ◆ Continue to learn about ML libraries and frameworks such as Scikit-learn, Pandas, Numpy, Tensorflow and Keras
- ◆ Skilled in prioritizing and managing multiple tasks simultaneously while mastering innovative software and tools

### Data Engineer

2019.11 ~ 2020.04

Hubudub, Calgary AB, Canada

Enrolled as a Data Engineer for data engineering and visualization.

- ◆ Worked in .NET Framework environment with C#, ASP.NET MVC5, SQL server, Entity Framework and Azure cloud platform
- ◆ Importing data from SQL server and generating automated reports with data visualization tools (Power BI, SSRS)
- ◆ Provided SQL server database integrations/migrations and creating SQL scripts to update databases in production

## SKILL & PROFICIENCY

### Programming Language

- Python
- JavaScript
- Java
- C#
- Scala

### Database

- SQL Server / T-SQL
- PostgreSQL
- MySQL
- Oracle DB / PL-SQL
- MongoDB

### Big Data Frameworks

- Apache Spark
- Databricks
- Hadoop
- Apache Kafka / Flink

### ML Libraries

- Pandas / Numpy
- Scikit-learn / Tensorflow
- Pytorch / Keras

### DevOps / MLOps

- Docker
- Kubernetes
- GitHub / GitLab

### Cloud Platform

- Microsoft Azure
- AWS

### Web Frameworks

- ReactJS
- Flask / Django
- .NET Framework
- NodeJS
- AngularJS

## EDUCATION

 Full Stack Developer Program  
EvolveU  
2019

 Bachelor of Computer System  
Engineering  
Chosun University, South Korea  
1998~2005

 Bachelor of Mechanical  
Engineering  
Chosun University, South Korea  
1998~2005

## LANGUAGE

 English, Korean (Native)

- ♦ Developing visualization reports, dynamic dashboards, data relational modeling, editing queries and DAX coding in Microsoft Power BI
- ♦ Predictive behavior analytics based on behavior patterns and factors of individual users and create forecasting report

### Full Stack Developer

2019.02 ~ 2019-10

EvolveU, Calgary AB, Canada

Enrolled as a Full Stack Learner for web and software development. What I have been working and learning from the course is as follows:

- ♦ Solid understanding of Computer Science theory including software engineering, database, data structures and algorithms
- ♦ Understanding of practices in Responsive Design, DevOps, CI/CD, Test Driven Development (TDD), Software Development Lifecycle (SDLC)
- ♦ Full stack development experience building application and software using various frameworks and libraries based on JavaScript and Python
- ♦ Worked in Agile development environment using Scrum methodology
- ♦ Experience in version control system with GitHub

### Senior Project Engineer

2013 ~ 2018

Suncor Fort Hills, Calgary AB, Canada

Accountable to project engineering management, project information management, project interface, and regulatory compliance works for EPC including FEED engineering.

- ♦ Worked with client, vendors and other disciplines to follow up project execution plan, decisions, engineering issues and design deficiencies
- ♦ Managed engineering deliverable, schedule, and workflow
- ♦ Provided project status, budgets, schedules, and plans
- ♦ Developed plans, and coordinated reviews of engineering works

### Project Manager

2008 ~ 2013

Aprogen KIC, South Korea

Accountable to engineering and project management roles for oil and gas plant.

- ♦ Performed project management roles including proposal, cost control, planning, risk analysis, and change management with client

### Software Developer

2005 ~ 2008

Bonagirl, South Korea

- ♦ Development of both front-end and back-end modules for complex web-based applications and e-commerce website
- ♦ Evaluated code for efficiency, debugging and quality assurance
- ♦ Diagnosing, trouble shooting and resolving the issues

## PROJECTS

**AI credit system** – Data Preprocessing, Ensemble Prediction Model Simulation

**DW / Big Data** – Build big data pipeline using Spark, Kafka on AWS and Azure

**CDN Log Analytics** – Log analytics using Azure Synapse Analytics and Power BI

**ML/MLOps for smart factory** – Develop ML/MLOps architecture to build K-mean clustering analytics model of torque and angle using automated ML with Python SDK

**Data Analytics for YMCA Calgary** – Data Visualization of user behavioral patterns