JUSTINE OBIAZI

(541) 250 - 7517 | justineobiazi@gmail.com | Vancouver, WA | https://www.justineobiazi.com | LinkedIn

I am a results-driven Solution Architect with extensive experience in designing and implementing robust cloud infrastructure using AWS services. Expert in containerized applications, serverless architectures, and infrastructure as code. Demonstrated ability to translate complex business requirements into scalable and cost-effective cloud solutions while maintaining security and reliability standards.

RELEVANT COURSEWORK

Coursework: Machine Learning, Causal Inference For AI, Probabilistic Graphical Models, Optimization in Water Resources Engineering, Applied Machine Learning, Methods of Data Analysis.

SKILLS

AWS Services: EKS, EC2, S3, Lambda, CloudFront, Route 53, DynamoDB, SQS, Redshift, IAM, VPC, RDS
DevOps & Infrastructure: Terraform, Docker, Kubernetes, CI/CD (GitHub Actions), Infrastructure as Code Programming
Languages: Python, JavaScript, Vue.js, R, Django, Flask
Databases & Analytics: DynamoDB, Redshift, MongoDB, SQL, BigQuery
Machine Learning & AI: AWS Bedrock, Amazon SageMaker, TensorFlow, PyTorch, Computer Vision, NLP, VertexAI

EDUCATION

M.Sc., Civil Engineering – *Oregon State University (2024)*
BSc, Civil Engineering – *Covenant University*
Cloud Professional Certificate -- *AWS Cloud Institute* (2025)

PROFESSIONAL EXPERIENCE

Graduate Research Assistant, Oregon State University   **2022 - 2025**

- Conducted advanced data extraction and processing by creating complex SQL queries to analyze and manage extensive datasets of malicious files.
- Pioneered the development of both supervised and unsupervised machine learning methodologies, designed to detect and cluster real-time SWAT data for stream temperature.
- Successfully executed data retrieval tasks, involving over 100 million records of stream temperature data, utilizing BigQuery and effectively stored the data in a GCP cloud storage database.
- Demonstrated strong programming skills by constructing a Python-based pipeline to develop a sophisticated clustering-based algorithm to identify high-temperature stream areas.
- Leveraged machine learning classifiers to annotate and identify census tracts with historical evidence of evacuation during previous floods in Oregon.

Data Scientist, Kobo360 Logistics Company   **2021 – 2022**

- Spearheaded data collection and rigorous data cleansing efforts for transport data across six African countries within Kobo360's operational scope.
- Employed AWS Redshift for the efficient ingestion of meticulously cleaned data into the database, supporting data analysis endeavors.
- Applied advanced statistical and machine learning techniques to conduct in-depth data analysis, providing valuable insights into various aspects of the transportation industry.
- Developed and fine-tuned supervised predictive models to calculate trip prices based on an array of metrics and features, enhancing pricing accuracy.

PROJECTS

Event-Driven Data Warehouse Solution

2023

- Architected a scalable event-driven data processing system for real-time analytics on transportation data

- **Technical Implementation:**

  o Designed decoupled architecture using AWS SQS for message queuing between data producers and consumers

  o Implemented automated data ingestion from SQS to S3 data lake using Lambda functions

- o Created ETL processes to transform raw data for analysis in Redshift data warehouse
  - o Developed custom SQL queries and views for business intelligence reporting
- **Outcomes:** Reduced data processing time by 65% and enabled real-time analytics for business decision-making

Personal Website on AWS EKS (justineobiazi.com)

2024

- Designed and implemented a modern personal website using Vue.js, showcasing professional portfolio and technical capabilities
- **Cloud Architecture:**
  - o Deployed the application to AWS EKS for container orchestration and high availability
  - o Provisioned all infrastructure using Terraform for repeatable and version-controlled deployments
  - o Implemented CloudFront CDN for content delivery acceleration and global reach
  - o Configured Route 53 for domain management and DNS routing
  - o Utilized DynamoDB to capture and analyze visitor metrics and engagement patterns
- **CI/CD Pipeline:**
  - o Developed automated deployment workflows using GitHub Actions
  - o Implemented container registry integration for artifact storage
  - o Configured blue/green deployment strategy for zero-downtime updates

Conversational AI Assistant using AWS Bedrock

2024

- Designed and implemented an intelligent chatbot using AWS Bedrock and Claude AI model to assist with customer inquiries
- **Technical Details:**
  - o Leveraged AWS Bedrock for foundation model access and inference
  - o Integrated with custom knowledge base for domain-specific queries
  - o Implemented user feedback loops for continuous model improvement
  - o Deployed using serverless architecture (Lambda, API Gateway) for cost efficiency
- **Results:** Automated response to 75% of routine customer inquiries, reducing support team workload while maintaining high customer satisfaction

CERTIFICATIONS

- **Oracle Cloud Infrastructure 2024 Generative AI Professional**
- **2023 AGAID Digital AgAthon Participant**
- **Microsoft Certified: Azure Data Science Associate**
- **AWS Certified Cloud Practitioner**
- **AWS Certified Solutions Architect - Associate**
- **GCP Professional Data Engineer**