BRUNO C. M. BARRETO

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Data Science specialist with expertise in machine learning, system modelling, and dataset analysis seeking a challenging role as a Data Scientist, Analyst, or Software Developer at an ambitious technology-driven company.

EDUCATION

M.S. in Data Science - University of Washington, Seattle, WA – (3.95 GPA) (166 Verb. & Quant. GRE)	09/2023 - 04/2025
Certificate, Data Science - General Assembly	10/2022 - 02/2023
B.S. in Bioengineering w/ Data Science - University of Washington, Seattle, WA	09/2018 - 07/2022
Certificate, Azure Data Science Associate (DP-100)	07/2022 - 09/2022
Certificate, Azure Fundamentals (AZ-900)	06/2022 - 07/2022
Certificate, Azure Al Engineer Associate (Al-102)	04/2023 - 08/2023
Certificate, AWS Cloud Practitioner	05/2025 - 06/2025

EXPERIENCE

FULLSTACK SOFTWARE DEVELOPER - ZEZUME, SEATTLE, WA

05/2025 - 09/2025

Developed an agentic AI full stack solution hosted in AWS for automated resume management and tailoring, using
a serverless pattern with Cognito, API Gateway, Lambdas, DynamoDB, and S3 connected to a React single page
application leveraging the Claude API to adapt resumes to employment targets.

DATA ENGINEER - VIRGINIA MASON, SEATTLE, WA

09/2024 - 03/2025

 Developed a hybrid time-series forecasting model to predict U.S. spine surgery costs through 2030 based on operation, hospital, and patient data capable of explaining over 50% of the variance in historical surgery costs

INFORMATICS SPECIALIST - NANOSTRING, SEATTLE, WA

12/2021 - 06/2022

 GEOMX SUSTAINABLE REAGENT PROJECT - Reduced operating costs for the GeoMx Digital Spatial Profiler by altering reagent container and modifying device software to intelligently monitor fluid requirements, resulting in a 20% drop in reagent costs.

DATA SCIENCE PROJECTS

DEEP LEARNING IMAGE CLASSIFIER

04/2022 - 06/2022

 Developed a model in Python to automatically classify images into 10 distinct categories using a trained convolutional neural network with 90% accuracy in classification.

PREDICTIVE NERVE REGNERATION MODEL

05/2021 - 06/2021

 Developed a model of peripheral nerve regeneration for neuroscientists that reduced growth factor conduit testing times by 100x using COMSOL Multiphysics.

TURBO GLYCOLYSIS PID CONTROLLER

04/2022 - 06/2022

• Created a PID controller in Python and MATLAB for ATP production in an unstable turbo glycolysis bioreactor that improved reactor settling times by 80% and made reactions stable.

HOUSING PRICE ESTIMATOR

11/2022 - 12/2022

Created a machine learning model to automatically assign appropriate house prices for realtors in Ames, Iowa
using a linear regression trained on local tax data, resulting in a model capable of accounting for 92% of variance
in house prices.

ACCIDENT SEVERITY PREDICTOR NLP

01/2023 - 02/2023

• Developed a model that can predict flight accident severity from a formal report with 90% accuracy and determine that improper installation and maintenance of airframe components was a key cause of high lethality

ATTENTION-BASED SENTIMENT CLASSIFER

05/2024 - 06/2024

 Developed an attention-based model to automatically determine the sentiment of a movie review from contextless review text with 88% accuracy

TECHNICAL SKILLS

Programming Languages: Python, SQL, Java, MATLAB, R, C++, JavaScript, TypeScript

Database Languages: SQL, MySQL, PostgreSQL, Microsoft SQL Server, MongoDB, GraphQL, SparkSQL

Machine Learning Frameworks: Tensorflow, PyTorch, NumPy, scikit-learn, Pandas, OpenCV, spaCy, skforecast, Scipy, Statsmodels, Polars

Machine Learning Types: Regression, Classification, Natural Language Processing, Neural Networks, Time Series **Software Technologies**: Git, Github, Slack, Jupyter Notebooks, Google Colab, Microsoft Office, Linux, Matplotlib, Seaborn, Tableau, Power BI, Flask, Kubernetes, Docker, Artificial Intelligence

Cloud Technologies: AWS, IAM, S3, Cognito, Lambda, API Gateway, DynamoDB, S3, EC2, Athena, Redshift, SageMaker, CloudWatch, Microsoft Azure, Azure AD, Azure VM, Azure Functions, Azure Blob Storage, Azure Files, Azure Synapse

WORK AUTHORIZATION

U.S. Citizen, authorized to work for any employer.