

# Degnan Kopa

**Location:** North Providence, Rhode Island  
**Career Path:** Data Science and Math  
**VISA Status:** US Citizen

+1-919-236-5423  
AmazonDegnan@gmail.com  
GitHub Profile  
LinkedIn Profile

Driven machine learning and data science practitioner with a strong foundation in mathematics, algorithm design, and scalable data pipelines. Skilled in Python, Java, MySQL, and major ML frameworks, with experience applying regression models, neural networks, decision trees, and clustering, and other statistical algorithms to large, complex datasets. Passionate about transforming data into actionable insights and building innovative, reliable AI solutions.

## EXPERIENCE

---

### • Senior Data Analyst & ML Engineer

07/2023 to 10/2025

*Bear Creek Arsenal*

Sanford, North Carolina

- Developed SQL reports on production, inventory, and operational metrics, and improved existing reporting processes through query optimization.
- Built predictive maintenance models using scikit-learn and TensorFlow/Keras to identify equipment likely to fail, enabling proactive maintenance and reduced downtime.
- Developed a data-structuring program using Pandas and NumPy to help the marketing team consolidate and interpret data pulled from multiple website sources, enabling clearer insights and more efficient analysis.
- Developed an AI-powered Botpress chatbot with NLP to automate customer support and improve efficiency.
- Migrated reports and analytics tools to AWS, utilizing Kubernetes for containerized, scalable deployments.

## EDUCATION

---

### • MIT Institute for Data, Systems, and Society | Cambridge, Massachusetts

2024-2025

*Certificate - Data Science and Machine Learning*

### • Stirling University | Scotland, UK

2021-2022

*Master of Science(M.S.) - Artificial Intelligence*

### • Bangalore University | Bengaluru, India

2016-2019

*Bachelor of Science(B.Sc) - Computer Science and Math*

## PERSONAL PROJECTS

---

### • Sentiment Analysis on Book Reviews Using Logistic Regression

*Developed a Logistic Regression Model to Classify Sentiment in Book Reviews*

- GitHub: [Link to project](#)

### • Implemented Machine Learning Algorithms to Analyze and Forecast Home Prices

*Using the state of California census data in order to build a model for the future housing prices.*

- GitHub: [Link to the project](#)

### • Developed a Linear Regression Model to Predict Student Scores Based on Study Hours

*Performed data analysis and applied linear regression to forecast student scores from study patterns.*

- GitHub: [Link to the project](#)

### • Machine Learning Classification of Feudal Japanese Warrior Types Using Decision Trees

*Applied decision tree models to classify feudal Japanese warriors based on historical attributes.*

- GitHub: [Link to the project](#)

## TECHNICAL SKILLS AND INTERESTS

---

**Languages:** Machine Learning, Java, Python, MySQL, Mathematics, BI, R Programming, MATLAB, C Program

**Developer Tools:** Enterprise Resource Planning, TensorFlow, Scikit-learn, Eclipse, Anaconda, Numpy, MySQL Workbench, Power BI, IntelliJ, Kubernetes, AWS

**Coursework:** Representing and Manipulating Data, Data Analytic, Statistics for Data Science, Deep Learning for Vision and NLP, Stochastic Processes and Optimisation, C Programming, Java Programming, MySQL, MATLAB, Unix Tools and Scripting

**Areas of Interest:** Mathematics, Data, and Machine Learning