

Jobin Mathew

SUMMARY

- Data Science intern at iNeuron Intelligence Pvt Ltd, Bangalore.
- Former Assistant Professor of Electrical Engineering at Assam Engineering College.
- Certified by Google for Machine Learning and Android App Development.
- Experienced in Machine Learning algorithms such as Linear Regression, Ridge Regression, Lasso Regression, Logistic Regression, Support Vector Machines, K Nearest Neighbours, Naive Bayes, Decision Trees, Bagging and Boosting.
- Experienced in implementing Machine Learning projects, deployed as Web Application through Continuous Integration/Continuous Delivery(CI/CD) pipelines.
- Dedicated, excellent problem-solving skills and ability to perform well in a team.

CONTACT DETAILS



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<https://github.com/joma13331>

EXPERIENCE

iNeuron Intelligence Pvt Ltd, Bangalore - 560037 - *Data Science Intern*

November 2021 - June 2022

- Implemented End to End Machine Learning Projects via CI/CD Pipeline established through CircleCI and Github Actions.
- Implemented End to End Projects using Supervised Machine Learning Algorithms such as Linear Regression, Ridge Regression, Lasso Regression, Logistic Regression, Support Vector Machines, K Nearest Neighbours, Naive Bayes, Decision Trees, Bagging Technique Like Random Tree Forest and Boosting Techniques like AdaBoost, Gradient Boost and XGBoost.
- Implemented End to End Projects using Unsupervised Machine Algorithms such as K Means Clustering, Hierarchical Clustering, DBSCAN and Principal Component Analysis.
- Data Management Using Databases such as MongoDB, Cassandra SQL, MySQL and SQLite3
- Data Collection using Web Scraping via BeautifulSoup and Selenium python Libraries.
- Completed the Full Stack Data Scientist Certification by iNeuron Intelligence Pvt Ltd

Assam Engineering College, Guwahati, Assam — *Assistant Professor*

January 2018 - September 2021

- Instrumental in department getting accredited by **National Board of Accreditation**.
- Published research in **Communication and Control for Robotic Systems, Springer, Singapore**.
- Faculty adviser for students in Projects related to machine learning.
- Organised Faculty Development Programmes and Short Term Courses on recent trends in IoT & Machine Learning
- Facilitated the Online End Semester Exams for Electrical Engineering Department during the Pandemic.
- Managed the webpage of the Electrical Engineering Department on college Portal.

PROJECTS

Energy Efficiency

- This work aimed at improving the energy efficiency of buildings by assessing the heating load and cooling load requirements as a function of building parameters.
- I was personally involved in all aspects of the project from writing the python code to deploying the project as a web application.
- Regression models such as Ridge, Lasso, Support Vector Regression, Random Forest Regressor and XGBoost Regressor were developed and the best selected to predict two continuous labels, the heating load and cooling load.
- Project is implemented as web application and deployed through a CI/CD pipeline via CircleCI, DockerHub and Heroku at energy-efficiency-project-joma.herokuapp.com/
- The project code is developed through pycharm following industrial practices such as Object Oriented Programming, logging and Exception Handling. The project code is available at <https://github.com/joma13331/Energy-Efficiency-Project/>

SKILLS

- Python
- Version Control using Git
- SQL, MongoDB, Cassandra Database
- Flask
- HTML, CSS
- Machine Learning
- Supervised Machine Learning Algorithms
- Unsupervised Machine Learning Algorithms
- Tensorflow
- Development using CI/CD Pipelines
- Power BI
- Excel
- Data Structures And Algorithms

CERTIFICATIONS

TensorFlow Developer Certificate TensorFlow

Issued Jan 2021

Expires Nov 2024

Credential ID 41745276

Associate Android Developer Google Developers

Issued Jan 2022

Expires Jan 2025

Credential ID 45476009

- The Machine Learning model exhibited adjusted R2 scores for the heating load of 0.99, 0.99, 0.98 and 0.98 while for the cooling load the adjusted R2 scores were 0.99, 0.72, 0.92 and 0.92 for 4 different test sets.

Concrete Compressive Strength

- This work aimed at estimating the compressive strength of concrete based on the materials and their quantity used in creating that particular concrete.
- I was personally involved in all aspects of the project from writing the python code to deploying the project as a web application.
- Regression models such as Ridge, Lasso, Support Vector Regression, Random Forest Regressor and XGBoost Regressor were developed and the best selected to predict the concrete compressive strength.
- Project is implemented as web application and deployed through a CI/CD pipeline via CircleCI, DockerHub and Heroku at <https://concrete-comp-strength-proj-jo.herokuapp.com/>
- The project code is developed through pycharm following industrial practices such as Object Oriented Programming, logging and Exception Handling. The project code is available at <https://github.com/joma13331/Concrete-Compressive-Strength-Project/>
- The Machine Learning model exhibited adjusted R2 scores of 0.84, 0.92, 0.85, 0.73 and 0.91 on five different test sets.

Credit Card Default Prediction

- This work aims at predicting whether a bank client will default on his/her payment of credit card bills for the next month based on the client's details and credit card activity of the past 6 months.
- I was personally involved in all aspects of the project from writing the python code to deploying the project as a web application.
- Classification models such as Logistic Regression, Support Vector Classifier, RandomForest Classifier and XGBoost Classifier were developed and the best selected to predict whether a client would default on credit card payment next month.
- Project is implemented as web application and deployed through a CI/CD pipeline via CircleCI, DockerHub and Heroku at <https://cc-defaulter-project-joma.herokuapp.com/>
- The project code is developed through pycharm following industrial practices such as Object Oriented Programming, logging and Exception Handling. The project code is available at <https://github.com/joma13331/Credit-Card-Defaulter-Project/>
- The Machine Learning Model exhibited AUC-ROC scores of 0.81, 0.84 and 0.83 on three different test sets.

Forest Cover Type Prediction

- This work predicts the forest cover type from strictly cartographic information.
- I was personally involved in all aspects of the project from writing the python code to deploying the project as a web application.
- Classification models such as Logistic Regression, Support Vector Classifier, RandomForest Classifier and XGBoost Classifier were developed and the best selected to predict the forest cover type.
- The Project is implemented as web application and deployed through a CI/CD pipeline via GitHub Actions and heroku at <https://forest-cover-type-pred-joma.herokuapp.com/>
- The project code is developed through VSCode following industrial practices such as Object Oriented Programming, logging and Exception Handling. The project code is available at <https://github.com/joma13331/Forest-Cover-Type-Prediction>
- The Machine Learning Model exhibited weighted accuracy of 84% on eighteen different test sets.

EDUCATION

National Institute of Technology, Srinagar J&K — *M. Tech, CGPA: 9.014*

M. Tech in Electrical Power and Energy Systems, July 2015 - August 2017

- Introduced to Neural Networks While Designing Maglev chassis Model for M. Tech Project

Cochin University of Science and Technology, Kerala — *B. Tech, 76.25%*

B. Tech in Electrical and Electronics Engineering, July 2010 - May 2014

- Performed **Relay Coordination** for **Fertilisers and Chemical Travancore Limited** as B. Tech project

GATE Electrical Engineering: Rank 1174

PUBLICATIONS

[Adaptive](#)

[Backstepping-Based](#)

[Non-singular Finite-Time](#)

[Sliding Mode Controller](#)

[for Suspension of Maglev](#)

[Platforms,](#)

Communication and

Control for Robotic

Systems, Springer,

Singapore.

COURSES

- **Machine Learning** authorised by **Stanford** University and offered through **Coursera**
- **Deep Learning Specialisation** from **DeepLearning.AI**
- **TensorFlow: Advanced Techniques Specialisation** from **DeepLearning.AI**

HOBBIES

- Chess (Elo rating 1472 on Chess.com).
- Reading (Fantasy and Science Fiction)