

# Aaditey Pillai

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## Education

### Duke University

August 2024 - May 2026

Master of Engineering in Artificial Intelligence

Coursework : Modeling Process & Algorithms, Sourcing Data for Analytics

### SRM Institute of Science and Technology

June 2019 - May 2023

Bachelor of Technology in Electronics & Communications Engineering

Coursework : Signals & Systems, VLSI Design, Computer Communication Networks

## Skills

Languages : Python, C++, SQL

Technologies : Scikit Learn, TensorFlow, PyTorch, Seaborn, NLP

## Work Experience

### Machine Learning Engineer | Celusion Technologies Pvt. Ltd., Thane

September 2023 - June 2024

- Conducted data pre-processing tasks like handling imbalanced data and feature selection, resulting in the removal of 500 duplicate entries and the restructuring of 1000 records for enhanced model training.
- Collaborated on developing machine learning algorithms, contributing to the creation of 3 new predictive models for customer behavior analysis.
- Contributed to model optimization efforts like Hyperparameter Tuning, Feature Engineering, and Optimizing Loss Functions, resulting in a 30% decrease in model inference time for real-time applications.
- Engaged in regular team discussions, sharing insights that resulted in the implementation of several innovative model enhancement ideas.
- Utilized Python extensively, leveraging libraries like Pandas, NumPy, and Scikit-learn for data manipulation.

### Cyber Security Consultant | BSE Technologies Limited, Mumbai

January 2023 - July 2023

- Configured and maintained SIEM systems, set up data sources, created and tuned rules, updated the system as needed, and achieved a 95% system uptime through regular updates and maintenance activities.
- Investigated 50+ incidents, achieving an average resolution time of 4 hours per incident.
- Conducted regular security assessments, and developed and implemented 3 new security controls, enhancing overall security posture and compliance adherence.
- Collaborated on integrating SIEM QRadar with 2 new security technologies, improving threat detection and enhancing cross-team workflows for enhanced security response.

## Projects

### Weakly Supervised Road Segmentation using Satellite Feed

July 2023 - September 2023

Developed a system using satellite images and weakly supervised learning to detect and segment road areas. Improved image quality through preprocessing, feature extraction, and logistic regression, leading to high accuracy. This system can be applied in areas like autonomous driving, city planning, and traffic management.

### Arduino-Based Drowsiness Detection for Bikers Using Helmet

January 2023 - May 2023

Developed an Arduino-based real-time drowsiness detection system for bikers' helmets, using eye blink detection via a camera and a combined Viola-Jones and Haar-like algorithm. The system accurately detects driver fatigue in real-time, helping to prevent accidents, and was successfully tested using an Arduino UNO and Raspberry Pi