

# Jeffy Merin Jacob

Authorized to work in the US for any employer

## Contact

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## Education

### Masters, Computer Science (Data Science)

University of Southern California, Los Angeles, United States  
CGPA: 3.4/4.0

08/2017 – 02/2019

#### Courses

Machine Learning - Data Mining - Artificial Intelligence - Database Systems - Geospatial Information Management - Information Retrieval and Web Search Engines - Web Technology - Analysis of Algorithms

### Bachelors, Computer Science and Engineering

St. Joseph's College of Engineering, Anna University, Chennai, India  
CGPA: 8.74/10.0

07/2013 – 05/2017

## Key Skills

- Python
- Python Libraries (pandas, numpy, scikit-learn, Django, Dash)
- Deep Learning (Tensorflow)
- Tableau
- SQL
- MS Excel
- Cloud Services (Google Cloud, AWS)
- C++

## Certifications

Data Science Foundations: Fundamentals (09/2019)  
Python Essential Training (12/2018)  
Statistics Foundations: 1 (12/2018)  
Learning REST APIs (06/2018)  
EMC Academic Associate (03/2016)

## Objective

Graduate Data Scientist passionate about developing predictive models that help tackle societal problems. Skilled in data cleansing, wrangling, visualization and machine learning. I am a data-driven storyteller characterized with a passion for coding and a zeal to take on challenges.

## Experience

### USC Center for Artificial Intelligence in Society (CAIS)

#### Student Intern

01/2019 – 08/2019

- Developed a Python Django web application for a preference elicitation machine learning algorithm.
- Performed feature selection (RFECV) on HMIS data to determine best number of features accuracy wise when using a Logistic Regression model.

### USC Information Technology Services

#### Summer Research Intern

05/2018 – 08/2018

Team: Data Networks and Operations

- Designed a dashboard using Python Dash and perfSONAR toolkit to visualize packet moment and re-transmits between BWCTL servers thereby monitoring network performance.

### Dowell Technologies

#### Intern

05/2017 – 07/2017

- Developed numerous simple to complex queries involving procedures, functions, triggers for diverse business requirements.
- Optimized queries using indexing strategies and altering database design.

## Projects

### Foundations of Artificial Intelligence (10/19 – 11/19)

Developed a game playing agent that plays the adversarial game - Halma using the minimax algorithm with depth = 5 and alpha-beta pruning. Each player starts with 19 game pieces clustered in diagonally opposite corners of the board. To win the game, a player needs to transfer all of their pieces from their starting corner to the opposite corner, into the positions that were initially occupied by the opponent.

### Applications of Data Mining: Charity Matching (03/2019 – 05/2019)

Created content based and collaborative filtering recommendation systems to recommend projects to donors in Oakland in order to maximize number of donations. Identified targeted donors who have previously donated to a cause and recommend similar projects to them.

### Machine Learning for Data Informatics: Supervised/unsupervised learning algorithms (01/2018 – 04/2018)

Improvement of Python code that created expert variables for a fraud detection algorithm. Initial code took 24 hours to run 100,000 records. The modified code took 20 minutes to run 97,000 records in addition to 4 more variables.

Developed decision trees, gaussian mixture models, SVMs as part of coursework with a purpose of developing a deeper understanding of the internal workings of various classifiers.