

## SHYAM SUBRAMANIAN

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### EDUCATION

**Worcester Polytechnic Institute (WPI)**

Master of Science in Data Science

Worcester, MA

May '20

**Anna University**

Bachelor of Engineering in Computer Science and Engineering

Chennai, India

May '16

**RELEVANT COURSES:** Deep Learning, Information Retrieval, Big Data Management, Knowledge Discovery and Data mining, Statistical Methods for Data Science, Artificial Intelligence, Database Management Systems

### TECHNICAL SKILLS

<b>Languages</b>	:	Python, R, C, C++, Java, JavaScript, C#
<b>Machine Learning Frameworks/Libraries</b>	:	Scikit-learn, SciPy, TensorFlow, Keras, Dask, PySpark, NLTK, Matplotlib, Seaborn, Bokeh, Plotly, Scrapy, Eli5
<b>Database Systems</b>	:	MS SQL Server 2012, MySQL, PostgreSQL
<b>Others</b>	:	Hadoop Ecosystem, Weka, Tableau, Google Analytics, SAS

### ACADEMIC PROJECTS

**Pose Estimation for Interactive Gaming**

Present

- Estimating human body pose and transferring the pose to a 3-D gaming character using Convolutional Neural Networks in Python Tensorflow library
- Dataset is from CMU Panoptic Studio and Common Objects in Context Key points data

**Quora Insincere Questions Classification, Worcester Polytechnic Institute**

Fall '18

- Dataset is from Kaggle, consisting of questions from Quora classified as Sincere or Insincere
- Converted text to vector space model using Latent Semantic Analysis, Word2Vec and Glove Word-Embeddings
- Extracted various features such as POS, sentiment analysis, profanity count and readability scores of questions
- Developed text classification system to classify questions from Quora as Sincere or Insincere using XGBoost algorithm with best cross validated f-score of 0.695 in Python

**PUBG Win Percentage Prediction, Worcester Polytechnic Institute**

Fall '18

- Player Unknown's Battle Ground is a famous video game. Dataset is from Kaggle with features extracted from the gameplay of gamers. Extracted statistical and ranking features based on aggregation of team players
- Developed a regression analysis system using ensembles of Random Forest and LGBM algorithms to predict the probability of winning with best cross validated MAE score of 0.026 in Python

**Yelp Recommendation System, Worcester Polytechnic Institute**

Fall '18

- Dataset is from a search service mobile app named Yelp, consisting of customer ratings and reviews for restaurants listed in the mobile app. Generated new features with sentiment analysis of reviews
- Developed User-based and Optimization-based Collaborative Filtering for recommending restaurants in Python

**Comparing Online Customer Service of FedEx and USPS, Worcester Polytechnic Institute**

Fall '18

- Gathered conversations between customers and technicians from twitter @FedExHelp and @USPSHelp
- Conclusions were arrived at based on Sentiment Analysis of overall conversations and average response time of both FedEx and USPS handles in Python

### WORK EXPERIENCE

**Web Developer, Worcester Polytechnic Institute, Worcester, MA**

Jan '19 - Present

- Improved WPI website performance and accessibility using insights from Google Lighthouse and SiteImprove
- Enhanced SQL queries for faster selection and updates in Drupal PHP modules

**Member Technical Staff, ZOHO Corporation, Chennai, India**

May '16 - Jun '18

- Remote Control Web Application - Developed and maintained remote control web application, which runs both on cloud and as an on-premise tool. The tool lets IT technicians view and control any computer remotely
- Developed and integrated Voice and Video call using WEBRTC protocol
- Developed product wide search for features, articles and help documents using Apache Lucene
- Technologies used are C++ and C# in native client, HTML-5/Javascript in web client and Java in server.

### CERTIFICATIONS

- Data Science Associate from EMC Education Services with 98% in Data Science and Big Data Analytics exam
- Microsoft Certified Professional in Querying and Administering MS SQL Server 2012 Databases
- Microsoft Solutions Associate in MS SQL Server 2012