

# JAINAM AVLANI

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## EDUCATION

<b>University of Illinois at Urbana Champaign</b> Master of Science, Information Management	Aug 2021 – May 2023 GPA: 3.9/4.00
<ul style="list-style-type: none"><li>Emphases in Data Statistical Model &amp; Information, Programming in Analytics and Data Processing, Data Warehousing and Business Intelligence</li></ul>	
<b>Thadomal Shahani Engineering College, India</b> Bachelor of Technology, Information Technology	July 2016 - May 2020 GPA: 8.4/10
<ul style="list-style-type: none"><li>Emphases in Database &amp; Management Systems, Data Structures and Algorithm, Data Mining, Management Information Systems</li></ul>	

## TECHNICAL KNOWLEDGE

- Technical: Python, R, SQL, Java, C#, C, TCP/IP, CISCO Wireless Network, HTML, CSS, REST, Amazon Web Services
- Python Libraries: NumPy, Pandas, Matplotlib, TensorFlow, NetworkX, Pytorch, BeautifulSoup, OpenCV, DeepChem, Transformers, RDKit
- Machine Learning: Supervised Learning Classification (Linear Regression, Decision Tree, Random Forest), Unsupervised Learning Methods (K-Means Clustering, Principal Component Analysis [PCA])
- Analytics Tools: Tableau Desktop, Power BI, Microsoft Office Suite
- Project Management Tools and Framework: Agile and Scrum Development, Kanban, Jira

## EXPERIENCE

<b>TSS Consultancy Private Limited, India – Software Developer</b>	Nov 2020 - July 2021
<ul style="list-style-type: none"><li>Upgraded financial software of banks for customer verification to predict financial crime</li><li>Revamped Microsoft SQL Server Database and added recruits to the databases, increasing retrieval speed by 20%</li><li>Managed change requests, trouble calls and worked with the team to resolve them effectively reducing the bugs encountered by 25% over each sprint</li><li>Administered specific software needs and requirements of 5 banks</li><li>Promoted Agile software development framework, enabling periodic task delivery to the client, hence increasing customer satisfaction</li></ul>	
<b>Docsumo, India – Data Science Intern</b>	May 2019 - July 2019
<ul style="list-style-type: none"><li>Automated ETL pipeline using AWS Glue, Lambda, Athena, and reduced data retrieval by 30%</li><li>Developed Python scripts to enable efficient pre-processing of data and estimation using classification models</li><li>Analyzed the market of OCR, focused on the region-wise market analysis using Power BI dashboards, helping stakeholders make data-driven decisions</li></ul>	

## ACADEMIC PROJECTS

<b>Business Intelligence Group – Senior Technical Consultant (Champaign, US)</b>	Jan 2022 – Present
<ul style="list-style-type: none"><li>Coded and deployed Python scripts for extraction, cleaning, and pre-processing of data from the data warehouse</li><li>Employed text-mining methodologies using Python's NLTK to automate the classification of different species of trees</li><li>Stored the research data and scripts in AWS S3 bucket and created custom dashboards to visualize findings on Tableau using AWS Athena</li></ul>	
<b>Machine Learning Modeling for Reactivity of Organic Contaminants in Engineered and Natural Environment</b>	Jan 2022 - Present
<ul style="list-style-type: none"><li>Researched methods to implement machine learning models to predict the reactivity of organic contaminants (OCs) in engineered and natural environments</li><li>Restructured the neural network to help identify OCs of concern and optimize the treatment processes by using molecular transformers and ensemble model which consists of multiple fine-tuned models, increasing model confidence by 10%</li></ul>	
<b>Goodreads Book Analysis (Full-stack Data Science Project)</b>	Oct 2021 – Dec 2021
<ul style="list-style-type: none"><li>Extracted data from the list of best books ever from the <u>Goodreads</u> API using BeautifulSoup</li><li>Cleaned, analyzed, performed EDA, and implemented visualization techniques on the dataset using Python's Pandas and Seaborn</li><li>Created a MySQL database to store the acquired data and derived insights using Power BI</li><li>Configured a Recurrent Neural Network to implement Natural Language Processing to classify the genre of books based on the book's description. An accuracy of 98% was obtained on the test dataset</li></ul>	
<b>Flight Fare Prediction</b>	Jan 2021 – Mar 2021
<ul style="list-style-type: none"><li>Extracted and pre-processed the 2019 flight fares data of domestic flights in India to perform regression algorithms</li><li>Applied visualization techniques using Matplotlib to deduce knowledge about the correlation between independent and dependent variables</li><li>Compared different regression models using k-fold cross-validation, eventually implementing RandomForestRegressor using RandomizedSearchCV for hyperparameter tuning</li><li>An accuracy of 83% and 95% were obtained on test and train datasets</li></ul>	
<b>Gender Recognition System [Paper published with IRJET]</b>	July 2020 – May 2020
<ul style="list-style-type: none"><li>Reconfigured VGG-16 Convolution Neural Network architecture using Tensorflow and OpenCV for gender classification</li><li>Implemented YOLO algorithm to detect and extract faces from live image feed for image classification</li><li>Acquired an accuracy of 98% on the validation dataset</li></ul>	

## CERTIFICATIONS

- Data Science:** Introduction to Data Science in Python (Coursera), Data Science and Machine Learning (Python), Advanced Analytics (R)
- Deep Learning:** Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning(deeplearning.ai), Convolutional Neural Networks in TensorFlow (Coursera)
- Communication Skills:** Certification in Communication Skills exams till grade 3 from Trinity College, London, and secured a distinction in all the exams

## CO-CURRICULAR

- Working as a Course Assistant at the GIES Business School for subjects like Leadership and Data Analytics
- Volunteer for India Development Foundation (Project PH12), for awareness about using sanitary pads.