# Vandan Patel

Interested in the transformative applications of Machine Learning and Artificial Intelligence to enhance strategic business decisions. Experienced in various programming languages and technologies in addition to data manipulation, modeling, and visualization skills.

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Ann Arbor, MI

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### Masters of Science in Data Science

University of Michigan - Ann Arbor

08/2021 - 12/2022

GPA: 3.5

GPA: 3.95

Machine Learning, Statistical Inference, Regression and Data Analysis, Computational Methods in Statistics, Deep Learning, Numerical Analysis with Financial Applications, Agile Project Management, Practice and Communication in Applied Statistics, Theory and Practice of Linear Models

# Bachelors of Business Administration in Management Information Systems

University of Texas at Austin

08/2019 - 05/2021



### **WORK EXPERIENCE**

### Data Engineer Intern

Salesforce

05/2022 - 08/2022

Bellevue. V

- Developed ETL pipelines in Python to streamline internal processes for the Security Organization including cataloging SQL database table access, logging modifications and interactions to database, and structuring unstructured data for reporting purposes
- Deployed pipelines on AWS Lambda/Glue and optimized for efficient execution on AWS production environment
- Constructed full stack application with a dashboard-like user interface to allow for monitoring of database user activity and detection of anomalies

### **Security GRC Analyst Intern**

Salesforce

05/2021 - 08/2021

San Francisco, CA

Austin, TX

- Created Tableau dashboards to aid in the synthesize and visualization of security compliance data for continuous threat monitoring team
- Developed Python based automation utilizing Atlassian Confluence API to systematically catalog critical Salesforce Confluence pages

#### Research Assistant

University of Texas at Austin

10/2020 - 05/2021

- Built a language model to accomplish Named Entity Recognition on unstructured text data to identify victims of cybersecurity breaches in the healthcare industry
- Applied core knowledge of statistical modeling to assist with data cleansing and model validation
- Constructed and maintained Oracle SQL Database on AWS ECS to facilitate the integration of healthcare data and extracted text features



Machine Learning

Statistical Analysis

Text Mining

Data Visualization

Model Validation

NLP

Databases

Deep Learning

Business Intelligence

Full Stack Development

Web Application Development



## **TECHNICAL SKILLS**

#### **Programming Languages:**

Python, Java, R, MATLAB, Stata, C++, C#, Javascript, Typescript

#### Database/Server:

Oracle, MySQL, Amazon Redshift, MongoDB, GraphDB, Hadoop, Apache Spark and Kafka

#### Cloud Computing:

AWS ECS, AWS Lambda, AWS Glue, AWS S3, AWS API Gateway, AWS Athena, Google Cloud Run, Google Cloud Function, Google Cloud Storage

#### **Python Libraries:**

NumPy, Pandas, SciPy, Scikit-Learn, Matplotlib, spaCy, PyTorch, TensorFlow, OpenAI, Keras, Beautiful Soup



## **ORGANIZATIONS**

Quantitative Investment Society at the University of Michigan (10/2021 - Present)

Fundamentals Data Research Lead

Michigan Student Artificial Intelligence Laboratory (10/2021 - Present)



## PERSONAL PROJECTS

Sentiment Analysis of Political Rhetoric in News Media (03/2022 - Present)

 Aiming to gain insight into changing trends in political themes across various news media platforms over time

Automated System for Intraday Cryptocurrency Trading (04/2020 - 11/2021)

- Synthesized and aggregated historical returns data of Bitcoin and Ethereum in order to make predictions for intraday entry and exit points for long and short positions
- Created a statistical arbitrage portfolio based on a deep learning solution utilizing a Convolution Neural Network with Transformer



# Software Engineering Intern

Visa

05/2020 - 07/2020

- Designed Java programs to ensure validity and integrity of SQL database tables containing key financial data
- Developed command-line tool for server health monitoring and to ensure effective reconciliation of transaction data between databases
- Gained experience with working in UNIX and Linux environments and working with web services running Apache Tomcat



Austin, TX

### **PERSONAL PROJECTS**

# Wearable Device to Detect Opioid Overdoses (10/2018 - 07/2020)

- Constructed an integrated system to track body vitals data and deduce diagnosis
- Demonstrated high degree of accuracy through the use of effectively tuned Machine Learning algorithms for classification
- Implemented classifications into automated response system to administer emergency response treatment to overdose victims