EVAN SHRESTHA

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EXPERIENCE

Travelers, Consultant, Actuarial and Analytics **Jun 2019 – Present**

- Built a gradient-boosting decision tree model using XGBoost with an NLP sub-process in PySpark based on claim notes to predict nurse-need on workers' compensation claims
- Developed a deep learning vision model built upon ResNet to predict damage severity based on drone imagery to triage claim professionals after wind events such as hurricanes and tornadoes
- Created a tool to explain and visualize image model predictions using saliency maps, DeepLIFT, and other attribution methods with React.js and Flask
- Built monitoring dashboards to track the health and performance of fraud, severity, and propensity models
- Managed an intern in an Agile team who developed a dashboard to track KPIs around a new strategic notification process

Travelers, Actuarial and Advanced Analytics Intern **Jun 2018 – Aug 2018**

- Automated data-gathering and reporting for low-severity workers' compensation predictive models
- Developed indemnity payment calculator to improve the efficiency and accuracy of claim professionals
- Assisted with ad-hoc questions and investigated drivers behind the performance of new products

The University of North Texas, Research Assistant **Jan 2016 – Aug 2016**

- Submitted findings on the relationship between recursive group actions and continuous group actions

EDUCATION

University of Texas at Austin **Aug 2019 – Present**
College of Natural Sciences, Computer Science (M.S.)
G.P.A. 4.000
Relevant coursework: Deep Learning, Reinforcement Learning, Advanced Linear Algebra for Computation, Natural Language Processing

University of Texas at Austin **Aug 2017 – May 2019**
College of Natural Sciences, Mathematics (B.S.)
Elements of Computing Certificate and Applied Statistical Modeling Certificate
Dan K. Seilheimer, M.D. Endowed Undergraduate Scholarship
G.P.A. 4.000
Relevant coursework: Probability Models, Mathematical Statistics, Big Data in Biology, Elements of Software Design

University of North Texas **Aug 2015 – May 2017**
Texas Academy of Mathematics and Science (TAMS)
G.P.A. 4.000
Relevant coursework: Probability, Applied Statistics, Numerical Analysis, Vector Calculus, Real Analysis, Differential Equations

ACTIVITIES

Travelers Modeling Competition **2019 – Present**

- Built a deep learning model to predict Auto claim severity based on structured data and claim notes using TensorFlow on AWS and placed 3rd in the competition
- Developed an anomaly detection model to validate variables over time as execution monitoring support

Travelers InJam **2020**

- Created a tag-based recommendation model using Word2Vec as part of a collaborative social network in a hackathon to connect posts and people
- Developed a RESTful API with Flask to serve model recommendations along with a frontend built with React.js and Bootstrap

SuperTuxKart Bot **2019**

- Developed a vision-based deep learning AI bot to play hockey using PyTorch to reliably score against the built-in AI and other deep learning bots

sALS Genetic Research **2018**

- Used pandas, scikit-learn, NumPy, SciPy, and Seaborn to process, analyze, and visualize genetic data to determine common differential expression patterns of sporadic ALS in brain and spinal regions
- Cleaned raw count data by removing mislabeled gene entries with regular expression filters

SKILLS

Python, PyTorch, TensorFlow, pandas, NumPy, Jupyter, Spark, SciPy, matplotlib, Seaborn, Plotly, Flask, d3.js, React.js, XGBoost, NLTK, gensim, transformers, SQL, Teradata, Git, UNIX, QlikView, AWS, Java