HASAN CHEEMA

642 Jones St. Apt 307, San Francisco, CA 94102
hasan.asif.cheema@gmail.com | 989.854.9133

EDUCATION

Illinois State University - Normal, IL 08/2012-05/2014
- Master of Science, *Applied Statistics*

Central Michigan University - Mount Pleasant, MI 01/2011- 05/2012
- Graduate Certificate, *Data Mining*

University of Michigan - Ann Arbor, MI 09/2005-12/2008
- Bachelor of Science, *Mathematical Biology*

EXPERIENCE

Anthropos Performance – San Francisco, CA - *Computer Vision Consultant* 10/2016 – Present
- Serve as product manager as well as lead data scientist to leverage computer vision technology to provide users feedback about the quality of their workout.
- Responsible for creating OKRs for the team, delivering results to a non-technical CEO, and tracking project progress using GitHub project management boards.
- Involved in the full pipeline from problem conception - reading similar problems solved in similar domains in papers published on Arxiv.com – to data collection, data cleaning, data labeling all the way to creating custom deep learning C3D models, ensembling them with off-the-shelf centroid tracking algorithms, stacking final LSTM meta-model on top, and putting the model into production to provide near real-time feedback about workout quality.
- Consider production environment runtime vs. accuracy requirements for neural network models - from a customer Service Level Agreement perspective - while choosing a cross-validated architecture to freeze, quantize, and deploy into production.
- Tools: Python, Tensorflow, Keras, Matplotlib, OpenCV, Numpy, Pandas, Sklearn, Docker, Linux Server

Verisk Analytics – San Francisco, CA - *Data Scientist* 06/2014-09/2016
- Served as lead scientist and used NLP for entity recognition and extraction of medical services and prescriptions from thousands of pages of clinical notes to project future treatment for Workers Comp Medicare Set Aside. Mentored a junior data scientist to create a market-basket model for drugs and services as well as an intern to use deep audio analytics for information retrieval of social security number over the phone.
- Assisted the marketing department of banks target customers for balance transfer promotions by building a Logistic Model. Forecasted the amount of the balance transfer as well using a Gradient Boosted Trees Model.
- Used R to develop a Shiny application to automate the Exploratory Data Analysis process.
- Segmented credit patterns using SQL during Hurricane Sandy using catastrophic event data such as wind speed and water depth. The objective was to help banks come up with a measure of the level of affectedness to develop customized programs for delinquency forgiveness funds (excess of $1Million) during catastrophes.

State Farm - Bloomington, IL - *Data Science Intern* 11/2012-06/2014
- Used large-scale, high-dimensional automotive data in conjunction with external data to predict the annual mileage using Linear Regression, Random Forest, Neural Networks, as well as ensembles
- Collaborated with underwriting to develop an ensemble modeling approach consisting of a Logistic Regression Model blended with a Decision Tree to address the need for ordering a CARFAX report every 6 months to verify mileage. Implementation led to $50,000/year cost reduction.

Institute of Health and Business Insight - Mount Pleasant, MI - *Data Scientist* 04/2011-08/2012
- Performed Supply Chain Analytics for a Fortune 500 Company by optimizing the distribution of 30,000 dealerships by using Neural Networks.
- Composed a solution for the 2011 and 2012 SAS Shootout, a national data mining competition.

PROJECTS (https://hacheemaster.github.io)

- **Kaggle** Liberty Mutual: Predict Hazard counts for a given property (finished **top 12%**, username:_ike_)
- **Time Series Classification**: Human Action Recognition in Time Series cell phone data using Deep Learning
- **Churn Prediction**: Predict the probability that a customer will churn for a monthly music subscription service
- E-Commerce **Conversion Funnel Analysis**: Find any improvements in conversion rate for an e-commerce site