Scott P. White

Data Scientist, Chemical Engineer, Entrepreneur
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Skills

▪ **Programming:** *Languages* **-** Python, R, SQL/PostgreSQL, MATLAB, HTML/CSS/Javascript. *Tools* – TensorFlow/Keras, scikit-learn,, Plotly, Django, ggplot, glm, AWS, Git/GitHub.

▪ **Technical Skills:** Machine Learning, Reinforcement Learning, Statistical Analysis/Regression, Deep Learning, Natural Language Processing, Forecasting, Experimental Design.

Data Science

Data Scientist at *Strong Analytics (*strong.io*)* Jan 2019-Present

▪ Built and served an API to classify social media images with a Deep Learning Neural Network for a client in the tech industry. Analysis of the O(100 GB) of images with HPC and cloud servers cut our client's costs by rendering Google's Cloud Vision API superfluous.
- Keras, Tensorflow, OpenCV, Flask, AWS

▪ Designed and implemented RL agents that automate marketing programs for a client in the Entertainment/Gaming industry. Executed state-of-the-art Off-Policy Evaluation (Importance Sampling, Doubly Robust, MAGIC) of various agents to optimize before deployment.
- FB Horizon, Tensorflow, scikit-learn, Statsmodels, glm, lme4, PostgreSQL,

▪ Routinely constructed dashboards, automated reports, and presentations for technical and non-technical clients.

Data Science Fellow with *Insight Data Science (insightdatascience.com/)* Sept.-Nov. 2018

▪ Programmed an application (link), *Prescription Drugs: What's the Worst that Could Happen?,* to supplement health apps (e.g. WebMD) by providing likelihood estimates of adverse effects.

▪ Analyzed >20 GB of public health records to connect the profile of a user to the seriousness of their outcome by maximizing precision (~0.90) across various ML models.
– Utilized Scikit-Learn for Random Forest, Logistic Regression, Naive Bayes, and K-Means.

Engineering and Entrepreneurship

Founder of *Printed Bioelectronic Solutions (UMN Tech Start-Up)* Fall 2016 – May 2018

▪ Developed an electronic biosensing technology from a laboratory platform to an attractive prototype for Internet of Things (IoT) applications in the food safety space.

▪ Implemented data story-telling to gain customer insights (>100 interviews), recruit support from veteran entrepreneurs, and earn credibility with industrial partners.

▪ Led the project from inception to implementation as an entrepreneur. Successfully transitioned the technology from academia in <2 years.

Post-Doc and Ph.D. Student at *University of Minnesota – Twin Cities* Aug. 2012 – March 2018

▪ Extracted complex signal waveforms from noise, designed and identified key signal features to accurately apply a novel sensor to proteins, DNA (Python, MATLAB, R).

▪ Invented a patented technique for electronic transduction of interfacial molecular capture by combining printed electronics with microfluidics in a automatable fashion.

▪ Communicated the work via publications (four as first author), presentations (six oral), proposals (two funded), a patent (issued), and mentoring of students/visiting scientists.

Education

University of Minnesota – Twin Cities Minneapolis, MN
Ph.D. in Chemical Engineering, NSF Fellow Dec 2017

University of Iowa Iowa City, IA
B.S.E. in Chemical Engineering, Highest Honors May 2012