Scott P. White, Ph. D.

Data Scientist, Chemical Engineer
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Data Science

Senior Data Scientist at *AES Utilities* (AES) Jan 2023 – Present

▪ Technical Lead for Data Science and Analytics in a Utility serving >1M customers. Build data products for improved operations and perform analyses to inform executive decisions.

▪ HIGHLIGHT: I led the technical effort to **probabilistically forecast our reliability KPIs.** The results set executive-level targets that are reported to the Indiana Utility Regulatory Commission (IURC), the AES Board, and company-wide compensation benchmarks. We were recognized by the *Public Utility Fortnightly* with the Francis Upton Top Innovator award (see publications).

▪ EXAMPLE WORK: My public github (link) serves as a **display of skills and a platform to pontificate on the best practices** for modern DS. As I write this (11/25) much of the work is unpolished but the *process-gambling* repo outlines a project from raw-data to model prototype and the *website* repo publishes DS products at www.scottpwhite.com.

Publications

▪ Discussed the lessons learned and future roadblocks of applying AI-inspired optimization strategies to our reliability and operations programs in the *Renewable Energy World*. (link)

▪ Recognized by the *Public Utility Fortnightly* as a **Top Innovator in Utility Analytics** for our forecast of key reliability metrics under ranging budgetary conditions. (summary for non-members)

▪ Presented at DistribuTECH (2023, 2024) for collaborative efforts on advanced analytics for vegetation management. Presented at the Midwest Energy Association (Summer 2024) on Big Data meter analytics for customer satisfaction and dispatch auditing / optimization of incidents.

Data Scientist at *AES Services* (AES) Jan 2020 – Jan 2023

▪ Mastered the development and deployment of data products on the **Google Cloud Platform** (GCP). Built AI/ML products for real-time monitoring of Wind Turbine Performance that pull from our Etapro asset management tool and detect anomalistic trends in multivariate time-series data.

▪ Developed and monitored data pipelines to centralize data sources and integrate them into Google Cloud Platform as a hybrid Data Scientist / Data Engineer. Routinely handled TBs of **data with varying levels of structure** and integrity for end-users with diverse levels of data expertise.

Data Scientist at *Strong Analytics* (strong.io) Jan 2019 – Jan 2020

▪ Advanced existing projects by designing, executing, and analyzing statistical models for a range of clients in the Chicago area. Tools of choice: Python and **Amazon Web Services** (AWS).
▪ HIGHLIGHT: Built and served an API to classify social media images with a Deep Learning Neural Network for a client in tech. Our product ultimately rendered the Google Vision API superfluous.

Chemical Engineering

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

▪ Developed an **organic electronic biosensing** technology from a laboratory platform to an attractive prototype for Internet of Things (IoT) applications in the food safety space. Ultimately returned the technology back to academia for continued development under Ph.D. supervision and funding.

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

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

▪ Communicated the work via publications (four as first author), presentations (six oral), proposals (two funded), a patent (issued). Google Scholar Link (user=Jase9fkAAAAJ).

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