ADELINE SHIN

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EMPLOYMENT

Humana May 2020 – Present

Data Scientist 2, Clinical Analytics

- Led study design and opportunity sizing of populations for new clinical programs to improve health and create enterprise value for over 200,000 members
- Designed and analyzed outcomes of Social Needs pilots that have helped over 500,000
 members with social needs such as food insecurity and loneliness; determined through
 survey results and claims data to determine whether pilot should be expanded or not
- Led novel analysis measuring value of a digital product by matching member results with internal claims data, working with product managers and external vendors; Humana award recognition given for this analysis

Graduate Analytics Intern

- Designed lifetime value model to prioritize customer contact and expand Humana Pharmacy benefit to vulnerable populations
- Won inaugural Digital Health & Analytics (DH&A) Team Hackathon with a product for Humana members for the next pandemic

New York City Department of Health and Mental Hygiene

June-Aug 2018

Intern, Division of Informatics IT

 Condensed, analyzed, and updated National Provider Index data warehouse of 50 million rows for widespread and transparent use on projects within agency

Eli Lilly and Company, San Diego, CA

Academic Intern, Protein Purification

June-Aug 2017

Investigated new purification scheme nominated as one of Eli Lilly's Top 100 Innovations

Academic Intern, Protein Crystallization

May-Aug 2016

 Applied high-throughput crystallization of proteins to multiple projects, leading to discovery of 2 unique protein structures

EDUCATION

Columbia University Mailman School of Public Health, New York, NY

2019-2021

M.S. in Biostatistics, Theory and Methods Track

Carnegie Mellon University, Pittsburgh, PA

2015-2019

B.S. in Chemical Engineering with University Honors Additional Major in Biomedical Engineering, Minor in Drama

PROJECTS

Formulae.One

• Created analysis website for Formula One races, allowing users to visualize the differences between drivers and cars throughout races with graphs; built predictive model that determines final race order for each race

Medtronic Scoliosis Simulator

• Designed adolescent scoliotic model with mechanical and anatomical accuracy as prototype to test instruments and improve surgical outcomes; model is to be used by Medtronic R&D engineers and further developed

ChocLine Printers

• Designed chocolate 3D printer, optimizing for flow based on thermodynamic and rheological properties

SKILLS AND EXPERTISE

Data Science: SAS, Pyspark, Python (pandas, SciPy, NumPy, PySpark, scikitlearn), R (tidyverse, shiny, plotly), SQL, LaTeX, Power BI, Hadoop, Outcomes Analysis, Predictive Modeling, Machine Learning, Website Design, Study Design, GitHub **Engineering:** CAD, 3D-Printing, Laser Cutting, ASPEN, Prototyping, Consumer Product Design