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– Nicholas Sun –

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Summary

Profile · Statistician and data scientist with extensive experience performing analysis on massive, complex datasets. Interested in development of interpretable and robust tools backed by superior quantitative operating characteristics.

Areas of Expertise · Statistical methodology development, large-scale simulation studies, predictive modeling, development of visualization tools. Clinical trials and biomarker studies.

Frequently used · R, Python, SAS, Spotfire, SQL.

Education

M.S. Biostatistics, Columbia University Mailman School of Public Health — *New York, NY* — August 2016-2018

B.S. Mechanical Engineering, Columbia University — *New York, NY* — August 2012-2016

Professional Experience

Eli Lilly and Company — July 2018-Present

Senior Statistician, Lilly Research Laboratories — *Indianapolis, IN*

· Lead team to create cross-therapeutic automated visualization tools for adverse events reporting. Utilization increases reliability and decreases phase I dose-escalation review timeline five-fold. Recipient of Lilly Innovator Award 2020.

· Propose novel biomarker prediction models to analyze data from phase I trials. Methodology adopted by various groups working across multiple drug compounds after determination of positive value.

· Develop multiple drug dose-response models that inform stop-and-go strategies for dose-finding trials. Models implemented in ongoing trials. Rigorous simulation study and methodology presented in internal technical report

· Manage production, maintenance, and review of evidence packages submitted to FDA for drug approval.

· Create versatile R functions for creation of highly informative dual y-axis graphs, reflecting new closed loop insulin pump patient data over time. Used by pharmacology team for quick assessment of pump efficacy.

· Build and assess data-driven risk matrix of COVID-19 effect on trial endpoints to inform company-wide decision making process on continuation, viability and pivot direction of all new and on-going clinical trials.

· Head original Lilly initiative for handling and dissemination of confidential study data for public use. Introduce new pipeline for production of company-wide de-identified datasets.

· Contribute to Eli Lilly publications in various academic journals.

National Institute of Health — May-August 2017

Statistician, Biostatistics Branch — *Bethesda, MD*

· Developed new composite test for performing inference on difference in means with zero-inflated data.

· Authored report recommending new nutritional guidelines based on reanalysis of childhood nutrition dataset.

Software

· `PowerCompareZero` R package that includes various functions to compare, test, and run new inference procedures or analysis of semi-continuous data.

· `InsulinSensitivity` R and SAS project evaluating best use case for common measure of insulin sensitivity accounting for available information and efficiency and depth of desired conclusion.

Skills and Interests

· Language Proficiency: Mandarin-Full Professional; Spanish-Intermediate

· Community Involvement: Lilly service volunteer Boy Scouts of America (Crossroads of America Council).

· Interests: snowboarding, hiking, ultimate frisbee, fantasy football, online gaming.