

Engineering & Scientific Consulting

Andrew Kaplan, Ph.D.

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Professional Profile

Dr. Andrew Kaplan is a statistical Scientist in Exponent's Data Sciences practice with 10+ years of experience analyzing large and complex datasets. He is an expert at analyzing both epidemiologic and clinical trial data. Dr. Kaplan is also skilled in multiple statistical programming languages including R, STATA, and SAS.

Dr. Kaplan's breadth of training and experience enable him to provide invaluable statistical guidance and expertise to a wide variety of Exponent's projects, including those in utility, automotive, and healthcare industries. His interdisciplinary project experience requires that he is constantly finding new ways to apply quantitative analysis to emerging and evolving problems.

Dr. Kaplan received his Ph.D. in Statistics from UCLA in December 2022, where his research work employed point process models to a variety of epidemiologic applications such as forecasting the prevalence of various communicable diseases and predicting doubling time during notable surges. He developed a non-parametric version of the recursive point process model, an adaptation of the known Hawkes construct that allowed for variable rates of disease spread due to population immunity. His model was proven to outperform other comparison models for fitting and forecasting cases of mumps in Pennsylvania. During the COVID-19 pandemic, he analyzed doubling trends and accurately predicted case counts of SARS-COV-2 both in California and nationwide.

Dr. Kaplan previously worked for five years as a statistician and data manager for the UCLA Department of Radiology. His responsibilities included consulting on several feature selection and data science projects within the department and medical center. He was also a data analyst on many clinical trials, including a phase III study for a drug that proved to be highly effective in treating patients with renal cell carcinoma.

Academic Credentials & Professional Honors

Ph.D., Statistics, University of California, Los Angeles (UCLA), 2022

M.A., Applied Statistics, University of California, Santa Barbara, 2011

B.S., Statistics, California Polytechnic State University, San Luis Obispo, 2010

Academic Appointments

Graduate Student Researcher, Department of Statistics, UCLA, 2018-2020

Teaching Assistant, Department of Statistics, UCLA, 2018-2022

Prior Experience

Department of Radiology at UCLA (2012-2017)

MedQIA LLC – affiliated with Department of Radiology at UCLA (2017-2020)

Publications

Kaplan AM, Park J, Kresin C, and Schoenberg FP. (2021). Nonparametric estimation of recursive point processes with application to mumps in Pennsylvania. Biometrical Journal, DOI: https://doi.org/10.1002/bimj.202000245.

Coy, H., Douek, M., Ruchalski, K., Kim, H.J., Gutierrez, A., Patel, M., Sai, V., Margolis D., Kaplan, A., Brown, M., Goldin, J., Raman, S. (2019). Components of Radiologic Progressive Disease Defined by RECIST 1.1 in Patients with Metastatic Clear Cell Renal Cell Carcinoma. Radiology. 292(1).

Granpeesheh, D., Dixon, D.R., Tarbox, J., Kaplan, A., Wilke, A. (2009). The Effects of Age and Treatment Intensity on Behavioral Intervention Outcomes for Children with Autism Spectrum Disorders. Research in Autism Spectrum Disorders, 182.

Kleerup, E.C., Paul, T., Kim, H.J.G., Kaplan, A., Tashkin, D.P., Goldin, J.G., Cooper, C.B. (2015). Prediction of Differences between FVC and SVC in COPD Participants and Controls from SPIROMICS. 2015 May 19, San Diego Convention Center. *Poster and abstract presented at the Novel and Traditional Lung Function Assessment, American Thoracic Society Conference, 2015

Chu, G.H., Brown, M.S., Kim, H.J., Kaplan, A., Yang, K., Allen-Auerbach, M., Poon, C., Levine, B., Schiepers, C., Verma, R., Bridges, J., Vidovic, A., Ramakrishna, B., Ho, J., Scher, H., Goldin, J.G. (2013). Computer-Aided Bone Scan Lesion Area Quantitation: Inter-reader Measurement Variability (e16019). *Published in conjunction with the 2013 Annual ASCO Conference, 2013.

Lo, P., Kaplan, A., Kim, H.J., Goldin, J.G., Brown, M.S. (2013). Hole based analysis of emphysema in volumetric computed tomography. American Thoracic Society Conference 2013, 2013 May. *Poster and abstract presented at Chronic Obstructive Pulmonary Disease: Utility of Imaging.

Additional Education & Training

SAS Certified Base Programmer for SAS 9 (2008)