

Jonathan Luu

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Education

Harvard University, Graduate School of Arts and Sciences PhD, Biostatistics	Boston, MA May 2024
University of Southern California, Keck School of Medicine MS, Biostatistics	Los Angeles, CA May 2019
University of Southern California, Viterbi School of Engineering BS, Computer Science & Computer Engineering	Los Angeles, CA May 2017

Research Experience

Expanding the two-part model for clustered semi-continuous data	2022
<ul style="list-style-type: none">Developed Bayesian model to efficiently analyze cost and healthcare utilization data in nursing homesApplied model and metrics to Medicare data consisting of 20 million nursing home residents	
Addressing incomplete and missing electronic health records data in implementation science	2022
<ul style="list-style-type: none">Characterized and quantified missing data in EHR databases maintained by community health centers	
HaSET program: Analyzing stunting of newborns in Ethiopia	2022
<ul style="list-style-type: none">Analyzed data with significant measurement error to approximate prevalence of stunting in Ethiopia	
Duration of viral shedding and culture positivity with post-vaccination breakthrough delta variant infections	2021
<ul style="list-style-type: none">Collected viral load and culture samples from MGH employees who tested positive for SARS-CoV-2Performed survival analysis and a spline predictive analysis on the data	
Estimating the treatment effect in randomized trials with correlated time-to-event outcomes	2020
<ul style="list-style-type: none">Simulated and compared three analysis methods for cluster randomized clinical trials	
LOFT-HF sample size re-estimation	2020
<ul style="list-style-type: none">Re-estimated sample size for the LOFT-HF trial using blinded aggregate data	
A phase I/II study of E7389 Halichondrin B analog in metastatic urothelial tract cancer and renal insufficiency	2019
<ul style="list-style-type: none">Produced Kaplan-Meier plots, response and toxicity tables, and baseline statistics for DSMC reportAnalyzed data using multivariate Cox regression for progression-free and overall survival	
A simulation evaluation of the effectiveness and usability of the 3+3 design for phase I clinical trials	2019
<ul style="list-style-type: none">Compared the 3+3 algorithm for phase I RCTs with more sophisticated methods through simulation	
Expanding access to home-based palliative care: a randomized controlled trial protocol	2018
<ul style="list-style-type: none">Initiated and monitored REDCap database to collect data for the trialSummarized demographics, ineligibility criteria, and patient concerns to present to funding agencies	
Deep-web polar insights search engine	2016
<ul style="list-style-type: none">Assembled search engine that crawled the deep web for polar-related research dataBuilt branded website with inbuilt data visualization capabilities using Banana and D3.js libraries	

Teaching Experience

Teaching Assistant	
<ul style="list-style-type: none">Applied Survival Analysis (BST223)	2021-2022
<ul style="list-style-type: none">Intro to Data Science (BST260)	2021-2022
<ul style="list-style-type: none">Survival Methods in Clinical Research (BST224)	2022
Biostatistics Consulting Center	2021-2022
<ul style="list-style-type: none">Consulted clients on study design, analysis planning, and programming	
StatStart	2021-2022
<ul style="list-style-type: none">Taught R programming and basic statistics to high school studentsDeveloped computational and problem-solving skills by guiding students through a project	

Skills

Programming (from most proficient to least): C++, Java, R, Python, SAS, HTML/CSS, Stata, C, C#, Ruby, Julia, Stan
Software: Microsoft Office, Adobe Suite, AutoHotkey, Terminal, Linux, Bootcamp
Typing WPM: 175
Other: Git/GitHub, LaTeX, Cadence, IT experience