Howard Baik

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Education

Oregon State University Postbaccalaureate Degree in Computer Science

University of Washington

Master of Science in Biostatistics

University of Washington

Bachelor of Science in Statistics (Minor: Mathematics)

Work Experience

Yale School of Public Health

Data Scientist I

- Develop and execute statistical models for analyzing EHR and biobank datasets.
- Create and maintain software packages, as well as offer user support and training in coding and software tools.

Fred Hutch Data Science Lab

Software Development Engineer I

- Built an open-source Shiny app that enables the creation of automated videos from Google Slides or Microsoft PowerPoint.
- Integrated an open-source text-to-speech generation library, Coqui TTS, into an existing text-to-speech R package for enhanced text-to-speech generation capabilities and improved accessibility.
- Developed and submitted conrad, an R package for converting text into synthesized speech, to CRAN.

Merck

Contractor

Remote Feb. 2022-March 2023

Online

Seattle, WA

March, 2023

Seattle, WA

June, 2021

New Haven, CT

Seattle, WA

Sept. 2024-Present

March 2023-Present

Sept. 2023-Present

- Designed internal R packages and a Shiny app for analysis and reporting in a regulatory environment.
- Produced internal Shiny training material for biostatisticians and statistical programmers.
- Consulted stakeholders with differing technical backgrounds to meet their requirements for R packages and Shiny apps.

Merck

Biostatistics Intern

- Created an open-source R package for algorithmically querying ClinicalTrials.gov and building an analysis dataset for drug discovery and development within the broader scientific community.
- Programmed an interactive Shiny App for Merck users to extract analysis datasets by searching for treatment or condition.
- Tested two open-source R packages developed at Merck for standard adverse events analysis. (metalite & metalite.ae)

University of Washington School of Medicine

NIH Research Assistant

- Developed a Shiny Dashboard that allows patients and clinicians in addiction treatment to monitor patients' progress and goals over time.
- Prototyped a shinyMobile application of the dashboard for optimal viewing on a smartphone.

NOAA (National Oceanic & Atmospheric Administration)

Machine Learning Intern

- Created an algorithm to automatically detect upwelling, an oceanographic process that has a significant impact on global fishery production.
- Applied principal component analysis, k-means clustering, and hierarchical clustering to real-world image data to group patterns of upwelling.
- Documented findings in a blog post that elaborates on the detection algorithm and the significance of visualizations.

George Mason University Dept. of Computer Science

NSF REU Educational Data Mining Research Intern

- Analyzed real world datasets from Stanford Lagunita's course, Statistics in Medicine, by creating exploratory visualizations in ggplot2 and employing k-means clustering.
- Built an interactive web application (shinydashboard) that presents my analysis and visualizations in R.
- Presented a demo of the dashboard at the 9th International Learning Analytics and Knowledge (LAK) Conference.

Upper Gwynedd, PA June 2022-Aug. 2022

Remote

Fairfax, VA

June 2018-Aug.2018

Jan. 2018-Aug. 2018

Remote

Feb. 2022-June 2022