Su Hyun (Senna), Kim

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Education

Columbia University Master of Science, Biostatistics

New York, NY Sep 2024 - Present

Emory University

Atlanta, GA Bachelor of Science, Quantitative Science Studies of Psychology Aug 2019 – Dec 2023

Cumulative GPA: 3.98.4.00, Highest Honors (Honors thesis)

Work Experience

Columbia's Zuckerman Institute, Iigava Lab

Research Assistant

New York, NY Sep 2024 - Present

• Project lead, Antipsychotic recommendation system

- o Responsible for the comprehensive gathering, cleaning, and analysis of clinical data from 1600 patients related to schizophrenia treatment outcomes.
- o Collaborate with multidisciplinary teams to ensure the integration of clinical insights and data-driven methods.
- o Leverage advanced statistical techniques to derive insights, enhancing treatment personalization and efficacy.

Winship Cancer Institute of Emory University, The Brain Imaging Lab

Research Assistant

Atlanta, GA Aug 2022 – April 2024

Played a key role in a collaborative project with physicians, leveraging 3D spectroscopic MRI mapping to optimize radiation therapy for glioblastoma patients. (Publication)

- o Directed the management and integration of complex clinical datasets involving multi-site glioblastoma patients.
- o Applied advanced machine learning algorithms to process imaging data, improving accuracy in treatment planning.
- o Conducted comprehensive statistical and survival analyses, stratified by demographic information using Python, leading to critical insights into patient outcomes and contributing to the refinement of therapeutic strategies.
- Partnered with psychiatrists in clinical research investigating the therapeutic effects of ketamine in major depressive disorder patients.
 - o Managed and coordinated MRI scans to ensure precise data collection.
 - o Utilize machine learning algorithms to process and analyze imaging data, contributing to a deeper understanding of treatment efficacy.
 - o Overhauled data management and analysis workflows, delivering actionable insights that advanced the research findings.

Jeju National University School of Medicine

Research Assistant

Jeju, South Korea May 2018 - May 2019

Conducted case studies of local Severe Fever with Thrombocytopenia Syndrome (SFTSV) infections in Jeju, South Korea. (Publication 1) (Publication 2)

North London Collegiate School Jeju

Elementary School Chemistry Lab Instructor

Jeju, South Korea Aug 2016 - May 2019

- Developed and executed experimental chemistry curriculum for elementary students, grades 3-6, emphasizing hands-on experiments in an academic lab setting to foster interest and passion in STEM fields.
- Donated instruction booklets to local schools.

National Meeting Abstracts

- Su Hyun Kim, Trivedi, Anuradha G., Karthik K. Ramesh, Brent D. Weinberg, E. Hui-Kuo G. Shu, Hyunsuk Shim, and Eduard Schreibmann. Potential utility of spectroscopic MRI-based adaptive RT for glioblastoma identified by a quantitative RT volume analysis pipeline. American Association for Physics in Medicine, Annual Meeting, Houston, TX, July 2023 (Oral)
- Trivedi, Anuradha G., Su Hyun Kim, Karthik K. Ramesh, Brent D. Weinberg, E. Hui-Kuo G. Shu, Eduard Schreibmann, Hyunsuk Shim Automated analysis pipeline using longitudinal spectroscopic MRI data to assess therapy response in GBM patients. RSNA Annual Meeting, Chicago, IL, November 2023 (Oral)

Skills

Programming: Python, R, SAS

Software / tools: Natural Language Processing, AWS services, Machine learning

Languages: English, Korean

Other: Manuscript writing, Collaboration, Teamwork