# Sean Grimm

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#### **EDUCATION**

George Mason University: Fairfax, Virginia May 2024 M.S. Health Informatics, Data Analytics GPA 3.8/4.0

George Mason University: Fairfax, Virginia Dec 2021 GPA 3.5/4.0 B.S. Kinesiology

# **TECHNICAL SKILLS**

Python, SQL, R, XML, STATA, MS Office, html, CSS

#### **EXPERIENCE**

Health Analyst Intern, NHIT, Washington D.C.

Jan 2024- Present

- Researched social determinants of health (SDOH) in Boston, MA.
- Engineered data analysis tools to identify critical health disparities and advocate for enhanced accessibility initiatives.
- Created SDOH visualizations as a PoC for NHIT's Data Fusion Center 2.0.

### Graduate Research Assistant, George Mason University, Fairfax, Virginia

Dec 2023 - Present

Led data integration between Label box API and GMU EAS-ID platform.

# Physical Therapy Assistant, Ascend Physical Therapy, Vienna, Virginia

Dec 2021- Dec 2023

- Facilitate the delivery of quality care in a timely manner.
- Diligently help to progress patients' exercises as needed.
- Collaborate closely with the physical therapists to ensure that the care plan was effective and efficient.
- Provide regular updates on patient progress and report any issues or concerns to the physical therapist for further action.

### **RELEVANT COURSEWORK & PROJECTS**

Datamining in Healthcare

Aug-Present

- Presented a comprehensive review on a journal article, "Predicting Total Knee Arthroplasty from Ultrasonography Using Machine Learning". The video presentation is available on my website under the projects section.
- Tasked with a group research project that examines heart stroke rate against demographic and health measurements. The project will consist of data collection, preprocessing, feature selection, model selection, performance testing, conclusive analysis, and presentation.

### Artificial Intelligence in Health

Aug-Present

- Created a random forest predictive model in python trained on 500 bruise images. The model correctly classifies bruise image light source type from 11 different categories, with an AUC score of 0.89.
- Tasked with a deep learning project that utilizes pretrained convolutional neural network models, transfer learning, and hyperparameter tuning. My project will build upon the YOLOv2 model, designed for determining KL grade (OA severity using x-ray) in knee joints, by inputting preprocessed knee x-ray photos the model has not yet seen as a PoC.

#### Advanced Statistics in Health Research

Aug-Dec 2022

- Researched the association between chronic health conditions (CHC) and demographic characteristics on fall frequency. Concluded that Age, Gender, Alzheimer's & dementia, and heart problems increase likelihood of falling; stroke, COPD, and Medicaid assistance have no association.
- Conducted and interpreted statistical analyses of health-related data sets using STATA.