CONRAD V. REIHSMANN

DATA SCIENTIST

Email:

cvreihsmann@gmail.com

Phone:

601.529.5006 Linkedin: linkedin.com/in/conrad-

reihsmann-18b52020b/

github.com/CReihsmann GitHub:

ABOUT ME

As a current research assistant within the Diabetes Center in VUMC, I've seen firsthand the growing importance of being able to handle and analyze large datasets. Seeing this trend, I was inspired to pivot from my current role towards data science to be able to maximize my contribution. Along my journey in learning these skills, my motivation evolved from merely necessity to genuine enjoyment as I sought to figure out the puzzles of wrangling and analyzing these datasets. With these skills, I'm hoping I'll be able to continue finding more puzzles to solve whether in academia or industry

SKILLS

- Python data manipulation and exploratory data analysis (EDA) using pandas, numpy, regex, matplotlib, seaborn, webscraping and html data manipulation with beautifulsoup and requests
- **R** data manipulation and EDA with tidyverse, dplyr, ggplot, plotly, interactive app development using R shinv
- PostgreSQL database import and manipulation (incl. complex joins)
- Microsoft 365 Suite
- HALO® Image Analysis Software
- Aperio/Leica ImageScope Image **Analysis Software**

EDUCATION

Data Science Bootcamp

Nashville Software School Apr 2022

Bachelor of Biological Sciences

Mississippi State University May-2016

Bachelor of Music Education

Mississippi State University May-2013

PROFESSIONAL EXPERIENCE

DATA SCIENTIST

Sep 2021 - Present

Nashville Software School | Nashville, TN

Intensive part-time bootcamp focusing on data science fundamentals and problem solving. Used real-world datasets and included projects where findings were presented to stakeholders from the community.

- Wrangled data and performed exploratory data analysis using Python's pandas library and R's tidyverse packages
- Created data visualizations using matplotlib, seaborn, and ggplot2
- Performed geospatial analysis using geopandas and folium
- Gathered data through APIs and webscraping
- Retrieved and analyzed data using PostgreSQL and sqlalchemy
- Built and evaluated statistical and machine learning models using the scikit-learn and statsmodels libraries
- Applied natural language processing using the nltk and spaCy libraries
- Performed network analysis on graph data using Neo4j
- Built and deployed interactive data visualizations using the R Shiny library
- Source code version control with Git/GitHub
- Project management/tracking with GitHub project boards and issue tracking
- Interacted with AWS using the CLI and ssh

RESEARCH ASSISTANT II - III

July 2019 - Present

Vanderbilt University Medical Center, Diabetes Center | Nashville, TN

- Collaborated with lab members to help efficiently execute experiments and to analyze and visualize data using excel, GraphPad Prism, and R for various publications, posters, and presentations.
- Helped develop and establish new protocols for ELISA and HTRF based hormone assays for the lab and associated Islet Core
- Coordinated with Islet Core to maintain quality through training improving procedures while strengthening communication to complete crucial experiments
- Stained and analyzed histological slides for immunohistochemistry and CODEX

RESEARCH ASSISTANT I – II, CORE

Jan 2018 - June 2019

Vanderbilt University Medical Center, Diabetes Center | Nashville, TN

- Collaborated with other Vanderbilt cores in collecting and analyzing data for joint projects
- Developed new standard procedures for imaging and analyzing islets through CellSens imaging software
- Prepared numerous SOPs for lab procedures and trained team members
- Assisted in the development of the HIPP Website

PROFESSIONAL EXPERIENCE

ENVIRONMENTAL LABORATORY INTERN

May 2015 - Aug 2015

Environmental Research & Development Center, Environmental Laboratories | Vicksburg, MS

- Processed samples collected from coastal wetlands
- Assisted in field work involving data collection for bats and small mammals

ARCHITECTURE AND ENGINEERING INTERN

May 2012 - August 2015

Engineering Research & Development Center, Funded by Department of Defense, Survivability Branch | Vicksburg, MS

- Assisted with the development and planning of survivability projects
- Compiled and edited engineering reports
- Built physical models for defense method testing

DATA SCIENCE PROJECTS

- ACCRE Project Collaborated with the Advanced Computing Center for Research and Education (ACCRE) to investigate effectiveness of their systems scheduler, trend of submitted jobs over time, and overall performance of the system based on traffic. Worked as a part of a larger group in composing visualizations, conclusions, and cohesive presentation for the clients. Datasets used included output file for all jobs run through scheduler and logs of every command to scheduler.
 - o Technologies used: Python
- Triathlon: Three Times the Data R Shiny app to investigate and visualize the sport of triathlon focusing on overall trends over time, how multiple variables affect final outcomes, and what countries are most competitive. Data used was gathered from results of the World Triathlon race series and was available through API requests at developers.triathlon.org.
 - Technologies used: R, R Shiny
 - App URL: <u>creihsmann.shinyapps.io/triathlon/</u>
- Hop Teaming Analysis Collaborated with Healthcare Bluebook to build a profile, investigate strengths and weaknesses, and provide recommendations for future growth for Vanderbilt University Medical Center. Analyses performed were based on a database constructed around the Hop Teaming dataset provided from Healthcare Bluebook and the NPPES Data Dissemination dataset. Worked as a part of a larger group to provide visualizations and conclusions and was a part of select group in coordinating a cohesive presentation.
 - Technologies used: SQL, Python, Neo4j, R

PEER-REVIEWED PUBLICATIONS & PRESENTATIONS

- Rachana Haliyur, John T Walker, May Sanyoura, <u>Conrad V Reihsmann</u>, Shristi Shrestha, Radhika Aramandla, Greg Poffenberger, Andrea H Ramirez, Sambra D Redick, Jenny Aurielle B Babon, Nripesh Prasad, Robert A Hegele, Sally C Kent, David M Harlan, Rita Bottino, Louis H Philipson, Marcela Brissova, Alvin C Powers, Integrated Analysis of the Pancreas and Islets Reveals Unexpected Findings in Human Male With Type 1 Diabetes, *Journal of the Endocrine Society*, Volume 5, Issue 12, December 2021, bvab162
- 2. Walker J, Haliyur R, Nelson HA, Ishahak M, Poffenberger G, Aramandla R, <u>Reihsmann C</u>, Luchsinger JR, Saunders DC, Wang P, Garcia-Ocaña A, Bottino R, Agarwal A, Powers AC, Brissova M: Integrated human pseudoislet system and microfluidic platform demonstrates differences in G-protein-coupled-receptor signaling in islet cells. JCI Insight, 5(10):e137017, 2020
- 3. **Reihsmann C**, Saunders DC, Izmaylov N, Kusmartseva I, Yang M, Atkinson MA, Wright CVE, Brissova M, Powers AC: Changes in Islet Cell Composition During Postnatal Human Pancreas Development are Largely Independent of Endocrine Cell Proliferation.

 Poster presentation at the virtual annual meeting of the Human Islet Research Network October 2020