

ALEXANDER FRIEDRICHSEN

alex.p.friedrichsen@gmail.com | linkedin.com/in/Alex-Friedrichsen | 802-922-8588 | honestafblog.com/Portfolio/

Secret clearance. Data analyst with proven experience in financial reporting, business intelligence dashboards, and automated ETL. Skilled in transforming complex datasets into actionable insights using Power BI, Python, and SQL. Demonstrated success in streamlining data processes and delivering clear visualizations for stakeholder decision-making.

M.S. Data Science | University of Vermont

August 2021 - May 2023

- Published **Evolutionary Machine Learning for Robust Facility Placements** in GECCO '23 and JuliaCon
- Completed Honors Thesis "Exploring Code Dissemination in Open Science" utilizing Google BigQuery and a high-performance computing cluster (VACC). Developed automated Python and Bash pipeline for analyzing scientific code repositories, creating network visualizations to reveal code sharing patterns

B.S. Data Science | University of Vermont

August 2018 - May 2022

- Minors in Economics, Mathematics, Computer Science, and Statistics. Four year tenure as CS Crew treasurer

Technical Skills

- *Data Analysis:* Python (Pandas, NumPy, Scikit-learn), R (Tidyverse), SQL. *Visualization:* Power BI (DAX), Tableau, Matplotlib. *Cloud & Databases:* AWS, Google BigQuery, Relational Databases. *Business Tools:* Excel, Git, Jupyter Notebooks. *Development Practices:* Agile Methodologies, Unit Testing, CI/CD

EXPERIENCE

Lead Strategist | Team Handshake Ultimate Guard

February 2024 - Present

- Analyzes 20,000+ game outcomes and coordinates 15-person global team through data-driven testing methodology

Software Engineer II | BAE Systems

August 2023 - April 2024

- Engineered Power BI data models integrating four data sources, reducing financial reporting time by 80%
- Streamlined labor tracking through custom dashboards, saving 20+ man-hours monthly across 8 managers
- Architected internal staffing solutions using SharePoint and MS Access, serving 16000 employees
- Spearheaded ETL pipeline integrating financial data, enabling transition from manual Excel analysis to predictive analytics

Software Developer | Social Ecological Gaming and Simulation Lab

August 2022 - July 2023

- Developed precision agriculture software using Python, C#, and JavaScript in Unity Game Engine

Public Health Analyst I | Vermont Department of Health

February 2019 - September 2021

- Automated monthly data processing using SAS scripts and Excel macros, reducing workload by 10+ hours monthly
- Published monthly data products analyzing unintentional drowning using SAS and R informing policy decisions for Vermont
- Processed and analyzed death certificate, CME, police, and toxicology data for CDC reporting systems