# **Thomas Serrano**

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#### SUMMARY OF QUALIFICATIONS

- · Collaborative team member, experienced at engaging with multiple projects at once
- Understands and utilizes CI/CD pipelines to automate code deployment
- Experienced in database management and web development
- Familiar with Azure website hosting and authentication
- Experienced in R, Python and Java, Express, SQL, Docker
- Articulate and able to convey ideas to stakeholders with varying levels of technical knowledge both verbally and in written form

#### WORK EXPERIENCE

Data Engineer, Pacific Northwest National Laboratory (Richland, WA)

2022 - Present

- Using Python and PANDAS, sanitized and organized large data files to be used by different scientists within the National Security Directorate
- Developed a Python package to help researchers load and parse and organize large datasets into a relational database
- Generated visualizations using large and unique data to help market datasets for sale within the lab
- Wrote code for antiquated hardware that extracts metadata from said hardware to help accelerate research

### Funds To Vote, Data Scientist/Backend Engineer (University of Washington)

2021

- Collaborated with a team of Informatics student to create a website to help inform American voters about the funding sources of senators and representatives
- Leveraged Google's representatives API, OpenSecrets funding API, and ProPublica bills API to create an accurate portrayal of funding and voting habits of senators and representatives
- Developed a backend written with Express is to deliver data to our frontend
- Utilized docker to package and manage each microservice that our website relies on
- Created bash scripts to automate the deployment of our website hosted on Digital Ocean

## mRkov, Data Analyst/Lead Software Developer (University of Washington) January 2020 – May 2020

- Collaborated with a graduate student to create an R package that allows novice R users to quickly aggregate, sanitize, tokenize, and simulate large bodies of text or twitter timelines
- Used Markov Chain Monte Carlo simulations to replicate bodies of text given to the program (3000 tweets at a time due to Twitter's API limitations)
- Created an R Shiny app so that users who cannot program may also use and experiment with the R package
- Presented a poster of the project at the University of Washington Undergraduate Research Symposium 2020

#### **EDUCATION**

University of Washington, Seattle

Informatics Data Science, GPA 3.72

Expected June 2022