# Miranda Cooper, Aspiring Analytics Engineer

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**SUMMARY** 

Aspiring Analytics Engineer who turns chaotic clinical and nonprofit data into HIPAA-ready, self-serve pipelines with R/Python + Power Automate, cutting manual effort up to 70% and replacing ad-hoc chaos with repeatable, compliant systems.

**SKILLS** 

Core Stack: Python (pandas, numpy, requests), R (tidyverse), SQL, dbt (self-teaching)

**Automation:** Power Automate, Bash / Zsh Scripting, Windows Task Scheduler **Data Platforms:** PostgreSQL, MySQL, REDCap (clinical), REST APIs, Salesforce

Version Control: Git, GitHub, GitLab

Visualization: Power BI, Tableau, Altair, Quarto

Process Design: Workflow Documentation, Cross-functional Collaboration, ETL

#### **EXPERIENCE**

### Programmer Analyst - Michigan Alzheimer's Disease Center, Michigan Medicine

2023-06 - Present

- Reduced manual entry 40% by engineering daily REDCap 
  ← SharePoint pipelines with R and Power
  Automate
- Built PEARL, a centralized participant-management platform for research studies: led system analysis, mapped and documented workflows, and automated SharePoint/Power Automate processes that streamline multi-study tracking.
- Accelerated team ramp-up from weeks to days by designing a GitLab onboarding course and reusable code templates that standardize analytics workflows.

#### Instructional Aide - University of Michigan, School of Information

2022-08 - 2023-04

- Collaborated with the teaching team via GitHub to develop Python lessons and implement Gradescope autograders, managing 150+ student submissions.
- Provided code debugging support and facilitated student learning, ensuring a smooth grading process and technical assistance for course participants.
- Supported course operations by managing student data in Canvas, including roster updates, grade tracking, and coordination with instructors to ensure data accuracy and timely feedback.

# Professional Services Intern - EnterpriseDB

2022-05 - 2023-04

 Built and documented workflow templates for global teams, standardizing onboarding and delivery in a distributed environment.

# **Development Operations Manager** - World Central Kitchen

2019-07 - 2021-06

- Led the migration from ActBlue to Salesforce, ensuring seamless data transition, system integration, and the establishment of efficient development processes.
- Administered Salesforce for a \$250 M fundraising engine: built ad-hoc dashboards and visualizations that gave executives real-time insight into campaign ROI, donor retention, and disaster-relief cash flow.
- Launched and integrated Classy with Salesforce via custom APIs, automating online receipt workflows and boosting one-click donation conversion by 35 % during high-urgency appeals.
- Supported revenue growth from \$10M to \$250M by driving data accuracy, system efficiencies, and operational scalability during high-impact periods, such as disaster relief efforts.

# **Development Operations Director** - City Year Washington, DC

2018-08 - 2019-06

- Led a cross-functional team of three (Comms, Events, Executive Support), streamlining workflows and performance KPIs to keep campaigns, collateral, and leadership requests moving in lock-step.
- Produced City Year DC's flagship gala and key fundraising events, coordinating vendors, sponsors, and volunteer corps to exceed annual donor-engagement and revenue targets.

#### **Development Operations Manager** - City Year Washington, DC

2017-08 - 2018-08

- Network data liaison: aligned DC's Salesforce fields, naming conventions, and KPI definitions with national HQ, enabling apples-to-apples reporting across 28 sites.
- Team lead for brand visibility: supervised a Communications Associate, set the social-media calendar, and coordinated email + event collateral to amplify local campaigns.
- National analytics voice: helped design a Power BI network dashboard that gave site leaders real-time fundraising snapshots.

### Development Operations Associate - City Year Washington, DC

2015-07 - 2017-07

- Guardian of 40k+ Salesforce records: handled daily donor-gift entry, resolved data conflicts, and produced weekly giving/retention reports for the leadership team.
- Executive support hub: managed calendars, donor correspondence, and briefing packets for the Executive Director and two Development Directors.
- Creative collateral producer: built print and digital assets in InDesign/Photoshop for campaigns, volunteer drives, and a 400-guest gala.
- Donor-thank-you optimizations: tightened acknowledgement workflows, cutting turnaround time from weeks to days and improving donor satisfaction.

#### **PROJECTS**

### **PEARL: Centralized Participant Data System**

Built and scaled the Participant Engagement and Research Lifecycle (PEARL) platform, automating 2024-04 workflows with Power Automate and Microsoft 365 to streamline multi-study participant tracking. Resulted in 40% reduction in manual entry and improved consistency of participant records across 10+ concurrent studies.

R, REDCap, Microsoft 365, Power Automate

### **Eligibility Rule Engine and Document Automation (R + REDCap)**

Developed an R script to aggregate REDCap participant data, automate eligibility evaluation, and 2023-10 generate standardized PDF reports. Reduced manual review time by 50% and improved documentation accuracy across stakeholder teams.

R, Batch Scripting, REDCap

# Secure PHI ETL Pipeline with R and Power Automate

Automated PHI extraction and REDCap archiving via R and Power Automate. Created structured, low-friction workflows for PHI delivery while maintaining HIPAA compliance and access control.

o R, Task Scheduler, Power Automate

#### **CERTIFICATES**

### PostgreSQL 13 Certification

EDB (Credential ID: EDB34938)

# **EDUCATION**

# University of Michigan, School of Information

Master's of Science - Information (Focus: Data Analytics)

2021-08 - 2023-04