# Profile

An experienced engineering professional with process design/improvement experience at a fast-paced public bio-technology company. Expertise in automation, process engineering, data analysis, and working with diversified teams. Polished written and presentation skills and business savvy in interpreting and applying data.

**Proficiencies**

Git / Python / Tableau / Microsoft SQL Server / MySQL / Hamilton Venus 3 / Tecan EvoWare / Rancher / Docker/ Confluence / JIRA

**Education**

B.S., Neuroscience & Behavioral Biology

*Emory University 08/2010 to 05/2015*

**Experience**

## Illumina – San Diego, CA

*Engineer I – Development 08/2019 to 06/2021*

* Managed onboarding and validation tasks for existing lab equipment and test operations for new and existing lab management protocols
* Developed Hamilton and Tecan liquid handling scripts for product software systems and high-volume manufacturing use
* Created scripted workflows for Illumina’s Infinium Razorfish+, Excalibur, and Beadpool microarray assays
* Led the design, development, and procurement effort for a replacement Laboratory Information Management System (LIMS) via AWS Lambda and Illumina’s InterOp sequencing library, and single-handedly maintained frontend (AngularJS), DevOps (Rancher), and backend/database (MySQL) operations for Illumina’s CORE LIMS system, SAGE/Rex

*Clinical Laboratory Technician II / Data Analyst 06/2016 to 08/2019*

* Customized SQL queries and created new data analytical tools using Python, R, and Tableau
* Successfully led an interdepartmental team in the validation of Illumina LIMS software
* Proactively developed automated processing scripts in Python to review QC data, built to replace previous manual spot-check process
* Conducted whole-genome genotyping using Infinium Assay Workflow in accordance with GCP and GMP
* Performed regular maintenance, troubleshooting tasks, and QC of automated liquid-handling robots
* Developed Tableau reports to analyze Tecan/Hamilton performances for laboratory operations

## Wesley Woods Neurology Clinic – Atlanta, GA

*Research Assistant 08/2012 to 04/2014*

* Managed a behavioral study to investigate the neurological links among sleep, aging, and memory
* Monitored sleep with EEG and software by measuring oxygen levels, identifying and analyzing sleep stages, coding memory levels and report data to Principal Investigator
* Singularly performed experimental procedures and conducted routine data analysis
* Trained all other research assistants on lab protocols, equipment, and procedures

**Certifications**

* Hamilton MICROLAB VENUS Software Training I #VST119.11
* Tecan EvoWare Liquid Handling Standard Software Training I