James Settles

Automation Engineer | Los Angeles, CA ▪ Settles.James.B@gmail.com ▪ (540) 479-7087
Linkedin: https://www.linkedin.com/in/james-settles-99675013a/
Website: https://eyefixcode.github.io/ | Github: https://github.com/eyefixcode

SUMMARY

Committed to advancing lab automation and leveraging data to solve complex challenges. I specialize in developing, validating, and deploying high-throughput automation workflows for serology and molecular based assays, ensuring efficiency, precision, and scalability. With 4 years of software development experience, I have worked with integrated automation systems primarily including the Hamilton MicroLab STAR.

My preferred tech stack includes Python, SQL, and R. I am experienced in integrating LIMS databases with automated liquid handling systems, optimizing clinical assay workflows, and developing KPI dashboards for both technical and non-technical audiences.

PROFESSIONAL EXPERIENCE

(Sep 2024 – Present) **SC CTSI — Data Analyst Intern (Community Engagement)**
o Optimized data storing, cleaning, and transformation practices for Diabetes Prevention and Management program supporting medically vulnerable communities in Los Angeles

(Jan 2023 – Present) **Curative, Exagen — Automation Engineer Consultant (Proteomics)**
o Transferred benchtop ELISA for organ damage study to Hamilton STARlet for increased assay precision, repeatability, and workflow efficiency
o Advised on all lab automation tasks surrounding Hamilton STARlet script development, troubleshooting, and system setup and relocation

(Feb 2022 — Jan 2023) **Curative — Systems Engineer (Systems Engineering)**
o Deployed python shell script to enable Hamilton to execute HTTP requests to LIMS database
o Optimized RT-PCR and NGS workflows on Hamilton STAR/STARlet
o Analyzed COVID-19 and Monkeypox incidence rates to inform lab expansion and developed agent-based model for staffing and FTE calculations

(Nov 2019 — Feb 2022) **PPD, ThermoFisher Scientific — Scientist, Automation Specialist (Vaccine Sciences Department)**
o Co-developed 6 Hamilton STAR scripts for serology team and designed validation plans
o Led and trained staff members on optimization of labware definitions and liquid class development on Hamilton
o Built data-mining script in python to extract Hamilton STAR utilization and error occurrences from logfiles
o Curated SQL queries for PIs on lab production and sample investigations
o Designed 2 VBA macros to track freeze/thaw cycles and optimize sample storage

(Jan 2019 — Jun 2019) **VCU — Research Assistant**

o Launched a prospective longitudinal study to investigate air quality trends in Richmond, VA by deploying 8 sensors to capture spatial variation in particulate matter (PM ≤ 2.5µm)

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EDUCATION

(Aug 2025) **University of Southern California** – Master in Public Health (MPH) – Biostatistics and Epidemiology

- o GPA: 3.81

(May 2019) **Virginia Commonwealth University** – Bachelor of Science (BS) – Biology

- o Chemistry Minor

CORE COMPETENCIES

Python	R/R-Shiny	SQL
Venus	Win CMD	Powershell
SAS	STATA	SPSS
Excel VBA	PostMan API	GitHub
PowerBI	Bash	HTML/CSS/JS

AWARDS

PPD Inc. part of ThermoFisher Scientific

(Feb 2021) *Awarded as part of the MODERNA team for excellence in automation assay development, validation, and production, accelerating COVID-19 vaccine clinical trials.*

ORGANIZATIONS

(Jun 2022 – Present) **Society for Laboratory Automation and Screening (SLAS)**

(Jan 2023 – Present) **American Society for Microbiology (ASM)** – Student Member

PROFESSIONAL QUALIFICATIONS

(May 2021) **HAMILTON Company** – Venus Software Development Training

VOLUNTEER WORK

VCU MCV Hospital

(May 2017 – Aug 2017) Surgical Trauma ICU Assistant

(Jan 2019 – Jun 2019) Massey Cancer Center Library Assistant

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Mary Washington Hospital
(May 2016 – Aug 2016) Orthopedic Surgery Physical Therapy Assistant

VCU Office of Sustainability
(Jan 2016 – Jun 2016) VCU Monroe Park Garden and Green Wall Construction