

Donald Campbell, MSc

Location: Denver, CO

Profile: <https://www.linkedin.com/in/donaldrcampbell/>

Github: <https://github.com/donaldcampbelljr>

SUMMARY

Open source software developer with a focus on software engineering in Python and Rust. Currently working in Bioinformatics. Previously in Medical Devices and Pharmaceutical Development.

SKILLS

- **Languages:** Python, Rust, C/C++, SQL, Caché, MUMPS
- **Technology:** SQLAlchemy, Pydantic, MATLAB, JMP, Minitab, Github
- **Data Analytics:** Statistical Analysis, Machine Learning, LLM for Bioinformatics
- **Leadership:** Small Business Founder, Strategic Planning & Execution, Technical Project Management
- **Biomedical Engineering:** R&D in Medical Devices, Bioinformatics, Biomaterials

EDUCATION & CERTIFICATION

- MS in Biomedical Engineering, Case Western University
- BSE in Biomedical Engineering, Tulane University
- Relevant Coursework
 - Machine Learning and Applied Statistics, Advanced MATLAB Programming, Systems and Signal Processing, Python, C++, Computational Biology (UVA Class Audit)

RELEVANT EXPERIENCE

Software Engineer II/Scientific Programmer - University of Virginia

2023 - Present

- Open source development of bioinformatics tools.
 - **Pipestat:** <https://github.com/pepkit/pipestat>
 - **Looper:** <https://github.com/pepkit/looper>
- Migrating open source lab tools from C++ to Rust.

Lead Research Scientist/Principal Scientist - Terumo BCT

2021 - 2023

- Champion internal data analytics projects, creating efficiencies in data capture and statistical analysis.
- Led team of scientists and engineers to design experiments and scientific verification and validation activities across a wide variety of technologies including: apheresis, blood and cell processing, disposables.

Research Scientist - University of Colorado

2019 - 2021

- Created digital workflows for formulation development to increase experimental reproducibility.
- Software development of cellular imaging and quantification systems using MatLab and Python.

Founder and Lead Programmer - Minds Eclipse Interactive, LLC

2017 - 2019

- Led team of creative and technical professionals to release The Mind's Eclipse on Steam and Itch.io.
- Python programming, game engine manipulation, market research and data analytics.

Senior Scientist - Liquidia Technologies, Inc

2013 - 2018

- Led secondary pharmaceutical formulation as an alternative to lead clinical trial candidate.
- Optimized process development saving 200+ manufacturing hours and over \$100k in material costs.

Technical Services - Epic

2012 - 2013

- Technical services engineer at Epic, Software Debugging, Caché programming.

FUN SOFTWARE PROJECTS

- **pyCaptainsLog** - procedurally generated text-adventure, leveraging GPT for world building: <https://github.com/donaldcampbelljr/pyCaptainsLog>
- **rsISS** - an ISS tracker written in Rust: <https://github.com/donaldcampbelljr/rsISS>