Morphy Kuffour

morpkuff@protonmail.com

860-573-6681

Linux-focused technology professional with hands-on experience in cloud engineering, MLOps, and infrastructure automation. Proven track record of optimizing systems performance and streamlining development workflows. Passionate about cybersecurity with strong foundations in networking and systems administration. Seeking to leverage technical expertise toward a role in cloud security or systems reliability engineering.

EDUCATION

University of Connecticut — Storrs, CT, USA
B.S.E, Computer Science and Engineering — *Aug 2019 - May 2023*
Relevant Courses: *Operating Systems, Data Structures, Analysis Of Algorithms, Machine Learning, Networking, Databases*
Programs & Clubs: *UConn Honors Program, UConn Upsilon Pi Epsilon, Louis Stokes Alliance for Minority Participation (LSAMP), National Society for Black Engineers (NSBE), UConn Cybersecurity Club, UConn Honors Society*

SKILLS SUMMARY

- **Systems & Infrastructure**: Linux, Nixos, Docker, Vagrant
- **Programming**: Python, Bash, Lua, Nix, C, PowerShell, awk
- **Cloud & DevOps**: Azure, ETL, CI/CD Pipelines
- **Tools**: Git, Neovim, Emacs, SQL
- **Certifications**: CompTIA Security+ (In Progress), RHCSA (In Progress), RHCE (In Progress)
- **Cybersecurity**: Netowrk Traffic Analysis, Log Analysis, Open Source Intelligence, Access Management

RELEVANT EXPERIENCE

- **Raytheon Technologies** — Remote
  Digital Leadership Development Program Associate — *May 2023 - Present*

  - **Cloud Data Engineer (Current Rotation):** Developing enterprise-scale AI solutions for manufacturing
    - Implemented MLOps pipeline: Reduced model deployment time by 40% through performance optimization and automated CI/CD workflows
    - Optimized data processing: Built Azure-based ETL pipeline that replaced a manual process, reducing processing time by 65%
    - Enhanced cross-team collaboration: Created standardized ML model deployment documentation

  - **Technical Product Manager (Rotation 2):** Led legacy application modernization initiative
    - Accelerated migration timeline: Built a Lotus Notes MVP using the Mendix platform
    - Increased collaboration : Improved cross functional communication by utilizing Agile methodologies
    - Automated reporting: Created data pipeline that saved 15+ hours of manual work weekly

  - **Software Developer (Rotation 1):** Developed compliance automation solutions
    - Streamlined document classification: Built PowerShell solution for SharePoint metadata management
    - Enhanced data governance: Integrated Term Store taxonomy reducing manual classification errors by 25%

- **Raytheon Technologies** — Remote
  Digital Leadership Development Program Intern — *Aug 2021 - May 2023*
  Supported enterprise-wide identity management initiatives focused on improving security posture and user experience. Collaborated with cross-functional teams to implement MFA solutions at scale.

  - Part of the RTX Corporate Identity Access Solutions team that facilitated Multi-Factor Authentication (MFA) solutions for over 30,000 employees.
  - Created documentation on Single Sign On(SSO) process.

- **UConn Research Assistant** — Hybrid - Storrs, CT
  Undergraduate Research Assistant — *Aug 2021 - May 2023*

  - Worked with Prof. Clay Tabor on porting Community Earth System Model (CESM) to the UConn high performance computing system.
  - Wrote honors thesis on "Creating Reproducible Environments with Nix for Scientific Computing"

- **UConn Teaching Assistant**   Storrs, CT
  Undergraduate Teaching Assistant for CSE 3140   *Jan. 2022 - Dec 2022*
    - Assist students in CSE 3140, a cybersecurity lab course, and provide office hours to answer student questions regarding coursework. Skills: Shell Scripting, Linux Configuration, Debugging, Cybersecurity

- **UConn Teaching Assistant**   Storrs, CT
  Undergraduate Teaching Assistant for CSE 1010   *Aug. 2021 - Jan 2022*
    - Assist students in CSE 1010, an introductory computer science course taught in Python and MATLAB, and provide office hours to answer student questions regarding course work.

- **UConn Information Technology Services**   Storrs, CT
  UITS Network Assistant   *Jan. 2021 - Jun. 2021*
    - Duties included troubleshooting network hardware related problems, remotely configuring routers and access points, conducting wireless surveys, and working with Cisco Prime Infrastructure software to manage subnets on the UConn Campus.

ACHIEVEMENTS

1st Place UConn Senior Design Project   University of Connecticut
May 2023   *Project: HuskyFit Mobile Application*

- Part of a team that designed a Health and Fitness Mobile Application

- Utilized React framework, AWS technologies, and other software development tools to simplify the development process

- Presented the project to industry experts, securing 1st Place in the design competition.

- Competed against 39 Engineering teams to achieve this recognition.

PROJECTS

Cross Platform Nix Configuration: Developed reproducible system configuration to solve inconsistency problems across multiple platforms. Built modular Nix configuration that works seamlessly across Linux, WSL, and OSX, reducing environment setup time from days to under an hour.
Repository: github.com/morphykuffour/nix

lookup.nvim: Created a Neovim plugin to solve the workflow disruption of looking up word definitions. Implemented an API-based solution that displays definitions directly in the editor without context switching.
Repository: github.com/morphykuffour/lookup.nvim

rawtalk: Addressing the limitations of keyboard customization software, rawtalk is a userspace tool for direct communication with QMK keyboards. Leveraged the hidapi library to enable layout switching and custom macros without leaving the terminal. Currently in beta with core functionality working. Tech: Rust, Nix, C
Repository: github.com/morphykuffour/rawtalk

Dactyl Manuform 5x6 Keyboard Build: Tackled ergonomic issues of standard keyboards by building a custom split keyboard. Designed and assembled a parameterized, concave, columnar keyboard with custom firmware, reducing wrist strain and increasing typing comfort. Documented the entire process on my blog to help others with similar builds. Tech: C, QMK, Hardware Design
Blog Post: Dactyl Manuform 5x6 Build Log