Dane Rieber

(303) 406-8716 | danerieber@gmail.com | linkedin.com/in/dane-rieber | github.com/danerieber

Education

University of Colorado Boulder August 2019 – May 2023

Bachelor's Degree in Computer Science, Bachelor's Degree in Applied Mathematics *GPA: 3.9*

Relevant Coursework: Algorithms, Computer Systems, Operating Systems, Advanced Data Science, Calculus III, Differential Equations, Matrix Methods, Fourier Series, Complex Variables, Operations Research, Applied Probability

Experience

UCHealth June 2020 - August 2022

Software Engineering Intern

- Designed and built a mobile app that standardizes and simplifies the patient rounding process for nurses
- Led meetings with nurse leaders, patient experience directors, and company executives to determine requirements
- Utilized **Microsoft Power Platform** to design the app and create API connectors to **Epic** for medical records
- Connected **Dataverse** tables with **Power BI** for the business analytics team to create reports
- Increased scores on patient experience surveys by **20%**, with **5000+ rounds** and **200+ active users**
- Kick-started UCHealth's **PowerApps Program** with the rounding app serving as a proof-of-concept

Projects

Remotd August 2022

- Remotd is a personal project that allows you to set a friend's MOTD in their terminal
- Built an API server with **Node.js** and **Express** that interfaces with an **oclif** command-line client
- Created a user-less authentication scheme that uses anonymous keys and plain English phrases for pairing clients
- Used **Redis** to store pairing data (phrases and client keys) and **MongoDB** to store MOTDs
- Leveraged the power of **Docker Compose** for quick builds of the server and straightforward, simple deployments
- Implementing end-to-end encryption to make the service completely anonymous

Yes, Chess! May 2022

- Studied patterns within opening moves from **over 5 million** chess games using the **Apriori** algorithm
- Explored relationships among the most active chess masters using **BigCLAM** community detection
- Gained a deeper understanding of how to process large data sets and select appropriate statistical models

Home Server

- Repurposed an old PC into a home server that acts as cloud storage, a media server, a firewall, and much more
- Used **Proxmox**, **OPNSense**, **LXC**, and **Docker** to provision virtual machines and create VLANs
- Operate all services behind an HTTPs reverse proxy using **Caddy** and **Let's Encrypt**
- Configured remote access to internal services with **OpenVPN** and some good old-fashioned NAT
- Improving redundancy and availability by leveraging **Ansible** and **K3S** clusters across geographical locations

Technical Skills

Languages: C#, C++, HTML/CSS, Java, JavaScript, Kotlin, MATLAB, Python, TypeScript, SQL
Frameworks: .NET, .NET Core, Bootstrap, Express, Materialize, Matplotlib, NumPy, OAuth 2, Pandas, NetworkX
Tools: Android Studio, Ansible, Azure DevOps, Caddy, Dataverse, Docker, Git, GitLab CI/CD, GNU/Linux, Jupyter, LXC, MongoDB, MySQL, Node.js, OData, OPNSense, PostgreSQL, Power BI, Power Platform, Proxmox, Redis, TFVC