Ben Lepsch

(434) 987 9468 | blepsch@gmail.com | https://bleps.ch

EDUCATION

University of Virginia Charlottesville, VA

Bachelor of Science in Computer Science Aug. 2020 – May 2024

EXPERIENCE

Controls Engineer December 2024 – Present

Impact Automation Columbia, MD

- Wrote Python scripts to generate XML files for repetitive Ladder Logic sequences
- Wrote Ladder Logic to control Allen-Bradley PLCs for automated sorting systems
- Assisted with mechanical setup, wiring, and debugging when installing new conveyor systems
- Designed and implemented changes to make system GUIs more modular using Python scripting
- Provided on-call tech support to assist Amazon technicians in debugging system errors during sorts

Rock Climbing Guide May 2024 – September 2024

Atlantic Climbing School Bar Harbor, ME

- Took clients rock climbing in and around Acadia National Park

Undergraduate Research Assistant May 2022 – August 2022

University of Virginia Charlottesville, VA

- Modeled the spread and evolution of infectious diseases, focusing on COVID-19
- Explored data visualization via Hidden Markov Models and Phylogenetic trees, using Auspice and HMMer
- Used Rivanna (UVA Supercomputer) to schedule and execute programs on massive data sets

Software & App Developer February 2020 – May 2020

Grome Charlottesville, VA

- Built an automated plant-watering system using C code to control an ESP8266 microcontroller that read soil moisture and temperature data, dispensed water based on a timer, and connected to a phone app to display data
- Designed and built a phone app using Blynk to connect to the ESP8266, view data, and adjust watering parameters

PROJECTS

bleps.ch | *Django, Cloudflare, Docker, Raspberry Pi/Ubuntu Server* October 2024 – Present

- Developing a full-stack web app using Django, running on my Raspberry Pi
- Used a Cloudflare Zero Trust tunnel with Docker to account for my non-static IP

BenBot | *Python, Git, Docker, GitHub Actions* May 2020 – Present

- Developed a discord bot using the Discord.py API wrapper
- Automatically builds a package when pushed to GitHub using a Dockerfile and GitHub actions
- Currently, the bot saves messages to a separate channel in my discord server
- Previous iterations of BenBot let users play minesweeper, forward messages to their DMs, and unlock their apartment door without an ID card

Drawbot | *Python, GCODE, UI Design* March 2022 – June 2022

- Collaborated with two UVA students to design and build a 3D-printer-esque machine to sign notecards
- Designed and built a desktop app written in Python to modify a GCODE file for the machine input
- Wrote code to control the motors for the machine, as well as the conveyor belt moving cards in and out

Bean Jump | *JavaScript, Python-Flask, SQL* November 2019 – February 2020

- Developed a browser game with persistent SQL storage for highscores

TECHNICAL SKILLS

Languages: Python, Rust, C/C++, Java, C#, SQL, JavaScript, PHP, HTML/CSS, Ladder Diagrams
Frameworks: Angular, Node.js, jQuery, Unity, Flask, Django, Bootstrap, LESS, JUnit, Ignition Designer
Developer Tools: Git, Docker, Heroku, Cloudflare, VS Code, Visual Studio, Selenium, Playwright, CAD, SolidWorks
Platforms: Linux (mainly Ubuntu & Raspbian), Windows, Arduino & ESP8266 Microcontrollers, Allen-Bradley PLCs
Miscellaneous: Microsoft Office Suite, Soldering, Rock Climbing, Conveyor belt tracking, Banjo