
Skills

OS	Linux, MacOS, Windows
Programming	shell scripting (bash/zsh), C/C++, Python, Javascript, SQL, MIPS assembly, Dyalog APL, HTML+CSS
Tools/Libraries	flask, BeautifulSoup, yacc + bison, PEGlib, Microsoft Office, git and github, Zola
Design and Layout	Adobe Illustrator, Adobe Photoshop, Inkscape, Blender3d, CAD, Mark-down, Lyx, Latex, Figma
Additional	Creative and technical writing, live presentation, improvisation and troubleshooting.

Projects

EdPyler

- A language I designed for use with the Edison robotics platform, inspired by Logo
- Parser built using the Parsing Expression Grammar formalism
- transpiles custom code to Python code that can be flashed to an Edison robot

Website for local band

- created a fully static site
- Designed the font, and logo to match the band's style
- antisepticide.neocities.org

Website Decompilation

- Used the Beautiful Soup Python library
- Decompiled a downloaded copy of my personal site to its original markdown files
- Recovered my website from lost source material

Lambda Compiler

- A compiler and interpreter hand written in python
- Written in multiple phases as a study into how compilers operate with a focus on functions and name management
- later passes used to study syntax tree transformers and error checking

Food Finder App

- Worked in a design team to build an interface
- used Figma to design an interactive dummy interface
- Conducted surveys and usability testing to validate our design

Static Site Generator

- Used Bash scripting
- Designed a recursive directory crawling template engine
- built to require minimal overhead and minimal additional files

Js Beats

- an interpreter built in javascript to run in the browser
- hand coded lexer, parser, abstract syntax tree evaluator
- Built a web interface with error checking and highlighting

Personal Site

- created a fully static site
- contributed to the theme design on github
- used Zola static site generator with Tera template engine

Experience

2023-ongoing **Instructor**, *Coding with Kids*, Portland, OR

- Present technical knowledge for various levels of experience
- Notice and respond to student emotional state
- Manage class equipment
- Improvise and problem solve on the fly to meet student needs and solve technical issues

2019-2023 **Tutor**, *Reed College*, Portland, OR

- Improved college student outcomes in mathematical analysis and Python
- Taught course material and introduced students to tools and techniques for independent study
- engineered materials introducing students to structured programming

Relevant Coursework

- Algorithms and Data Structures
- usability engineering
- Computer Sysytems