Konstantin Vasilyev

Computer Engineer

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Profiles denast TheDenast

Skills

C, C++	**Python**	**Linux**	**Git**	**LaTeX**
Docker	**x86 ASM**	**Nix**	**Networks**	**Electronics**

Experience

Amplified Industries — **April 2024 - Present**
Hardware Engineering Intern — Boston, MA
https://amplified.industries/

- [**Python**, **Linux**, **Electronics**] Designed a touchscreen kiosk-style device used for pressure sensor QC
- [**C**, **Python**] Developed an implementation of oil pump sequence peak finding algorithm to be deployed on microcontroller
- [**Python**, **SQL**] Maintained an internal application that guides user through manufacturing process while logging important information in the backend

Acoustic Wells — **Sep - Dec 2022**
Engineering Intern — Sommerville, MA

- [**Python**] Developed a complex python script used in pre-deployment QC of main company product
- [**Electronics**] Performed everyday engineering tasks including device assembly, soldering, broken device debugging

Education

Northeastern University — **December 2023**
Computer Engineering — Bachelor of Science
3.260 GPA

Electives: Computer Architecture & Systems, Software Security, Wireless communication Circuits

Other: Algorithms, Linear Systems, Networks, Electromagnetics, Discrete Structures, Calculus, Differential Equations, Linear Algebra

Projects

Chorded Text-to-Speech Device — **Jul - Dec 2023**
Graduation Project

In a team of six, designed a portable text-to-speech device, allowing quick communication for speech impaired individuals using chorded multidirectional button input

C++, Linux, Git

7MHz Radio — **May 2023**

Assembled, aligned and tuned a radio kit allowing for Morse transmission up to 40m @7MHz

Electronics, Wireless

Simple Linux Shell — **Nov 2023**
https://github.com/TheDenast/denast-shell

Wrote a Linux shell, capable of program execution, sequencing, dir navigation, file i/o

C, Linux

Elastic 2D Collision Simulation — **May 2021**
https://denast.dev/projects/collision/

Designed a 2D collision simulator with button controls, sounds, shape, and velocity customization using C++ without any graphics libraries

C++, FPGA