Nathan Wright

603-557-7804 · nathanwrightbusiness@gmail.com · NathanWrightUML · NateWright

Education

University of Massachusetts Lowell — Expected May 2024
Bachelor of Science in Computer Science; Minor in Mathematics (GPA: 3.9 / 4.0) — Lowell, MA
- **Relevant Coursework:** Computing 1-4, Operating Systems, Database 1/2, Software Engineering 1/2, Analysis of Algorithms, Intro to Linux Kernel Development, Compiler Construction

Experience

University of Massachusetts Lowell Nerve Center — Jun 2021 – Present
Human-Robot Interaction Intern — Lowell, Ma

Project: Assistive Navigation for People with Visual Impairments — Summer 2023 - Present
- Programmed a user interface in Angular and speed controlling handle in C++ on an Arduino Uno
- Developed an Angular application for establishing routes and points of interest for a robot
- Created routines for entering doors and picking up and dropping off users

Project: Assistive Robotics Teaching Assistant — Spring 2023
- Created resources for explaining and demonstrating Robot Operating System concepts
- Administered lab time with robots
- Debugged robots and code for students

Project: Selection Methods for an Assistive Robotic Scooter — Summer 2022 - Winter 2023
- Tested different user interface devices for selecting objects
- Collected data on performance of each participant

Project: Semi-Autonomous Object Retrieval for People with Disabilities — Summer 2021 - Fall 2022
- Developed a graphical android application using QT to navigate and grasped objects with Hello Robot Stretch
- Evaluated different segmentation methods for grasping objects on a table
- Contributed code upstream to improve Hello Robot Stretch

Projects

LeveledLogic | *Godot 4, GDScript*
- Developed a game for middle school students to teach Logic Design and Boolean Logic
- Created UML Diagrams and a Software Requirements Specification to outline the whole system for our customer
- Assembled a GitHub Action pipeline for building the game for Windows and Linux Flatpak
- Organized internal and external deadlines and distributed assignments for the team

Student Information System | *PHP, SQL, XAMPP, MariaDB*
- Developed a Student Information System as part of Database 1/2 project sequence
- Created an Entity-Relationship Diagram to model the database
- Programmed with PHP to create a website for students, instructors and admins to be able to sign up for classes, create courses and sections, appoint TAs and graders, and much more

Extracurricular Activities

Kennedy College of Science Ambassador — Fall 2022 - Present
- Spoke with perspective students individually and in auditoriums about my experiences at University of Massachusetts – Lowell
- Addressed questions and concerns from individuals about campus life and classrooms

Technical Skills

Languages: C, C++, Python, Typescript, SQL, Java, Dart, PHP, Nix
Technologies: Flutter, Angular, Qt, Android SDK, TensorFlow, Bootstrap, Tailwind, MariaDB, SQLite, ROS
Concepts: Compiler, Operating System, Virtual Memory, Cache Memory, Machine Learning, Neural Networks, API, Database Normalization, Agile Methodology, Cloud Computing, Linux Kernel