Kimberly Bytyci

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Skills & Abilities

Programming Languages	C++, Python, Java, Swift, Assembly, Visual Basic for Applications (VBA)
Web Development	HTML, CSS, JavaScript
Design/Simulation/Modeling	Verilog, Inventor Computer-Aided Drafting, Multisim, MATLAB
Microcontrollers/FPGAs	PIC, Arduino, Raspberry Pi, Nexys 3
Data Science	Machine Learning, Natural Language Processing
Languages	English, Albanian
Other	Project Management, Adaptable, Creative, Experimental, Self-Motivated, Team Player, Critical Thinking, Detail-Oriented, Data Structures and Algorithms

Projects

UNDERGRADUATE INDEPENDENT STUDY | CITY COLLEGE OF NEW YORK | JAN 2023 – NOV 2023

Machine Learning to Predict the Progression of Alzheimer's Disease

- Developed and trained an artificial intelligence model in Python with TensorFlow to predict the progression of Alzheimer's Disease using genetic data from patients.
- Worked under the supervision of a professor to refine the code.
- Implemented several linear regression models in addition to testing different architectures and training algorithms such as a genetic algorithm to find the optimal solution.
- Presented the research to students in a few undergraduate classes including an Introduction to Programming course and a more advanced Machine Learning and AI course.
- Wrote a final paper discussing the results.

SPEECH RECOGNITION

- Implemented a Convolutional Neural Network (CNN) using MATLAB to recognize words spoken into a microphone by a user.
- Trained the CNN using spectrograms generated from audio samples, optimizing the model for accurate speech analysis.
- Added a translation functionality to the program, enabling a user to translate their speech to a language of their choosing.

DIGITAL SIGNAL PROCESSING

- Developed an Assembly program to process an input signal for the PIC18F4520 microcontroller.
- Executed an Analog-to-Digital Conversion by applying quantization to the incoming signal.
- Implemented a Finite Impulse Response (FIR) Filter to generate a moving average of the input.

WEBSITE DEVELOPMENT

- Created and designed a website using HTML and CSS to be used as a personal portfolio.
- Used GitHub to host the website and maintain version control while updating the code.
- Integrated responsive design principles, ensuring optimal functionality and a seamless user experience across various devices and screen sizes.

Experience

ENGINEERING INTERN | JACOBS ENGINEERING GROUP | MAY 2023 – AUGUST 2023

Five Stations Renewal on Flushing Line

- Reviewed and approved submittals from the contractor.
- Managed and overhauled the submittals' database, streamlining the document control process.
- Managed tracking the progress of submittals and compiled necessary information into dashboards via the development of VBA programs to be used by the construction manager for weekly progress meetings.

COMPUTER LAB ASSISTANT | CITY COLLEGE OF NEW YORK | JANUARY 2023 – MAY 2023

- On-site resource to individual students and groups accessing computer technology; helped familiarize students with software and orient students to the laboratory.
- Troubleshooted and diagnosed problems with computer equipment running both Windows and Linux OS's. Performed maintenance and repair on equipment, as necessary.
- Managed the computer lab and provided for the general cleanliness, safety, and security of the laboratory area.

TUTOR | SELF-EMPLOYED | JANUARY 2023 – MAY 2023

- Conducted one-on-one tutoring sessions to assist students with Electrical Engineering courses.
- Developed and implemented personalized lesson plans to address students' specific needs.
- Provided guidance on study strategies and time management.
- Monitored and assessed student progress, adjusting teaching methods as needed.

ENGINEERING INTERN | JACOBS ENGINEERING GROUP | MAY 2022 – AUGUST 2022

East Side Access

- Participated in the Testing and Commissioning team.
- Witnessed the tests of several systems in the field including Fire Alarm, HVAC, Power SCADA, Building Management System (BMS), and Security systems.
- Tracked the progress of testing and commissioning through various stages of the process.
- Monitored daily logs of manpower and compared against the budgeted quantities.

BARISTA/TRAINER | STARBUCKS | APRIL 2019 – PRESENT

- Trained and certified all newly hired Starbucks partners through the Barista Certification process.
- Used active coaching to ensure all partners are following food safety procedures as well as drink recipes to provide premium quality products.
- Ensured health codes and safety standards are followed in order to maintain a high health score.
- Provided necessary direction to partners and ensured that partners perform their assigned duties.
- Oversaw daily supervision of newly hired partners along with the manager, motivating and leading them.

Education

EXPECTED GRADUATION DATE: DECEMBER 2024 | CITY COLLEGE OF NEW YORK

Major: Electrical Engineering B.E.

GPA: 3.0

GRADUATION DATE: JUNE 2020 | BROOKLYN TECHNICAL HIGH SCHOOL

Major: Electrical Engineering

GPA: 4.0