John M. Walsh

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(508)-299-9253
Months Available: May - August (Summer 2020)

Education

Northeastern University   **2019 - 2023** (expected)

Major: Candidate for Bachelor of Science in Computer Science
Minor: Business Administration
GPA: 4.0
Relevant Coursework: Fundamentals of Computer Science I and II, Discrete Structures, Tech and Human Values, Mathematics of Data Models, Organizational Behaviour

Falmouth High School   **2015-2019**

Academics: Graduated top 5% of class, SAT Score 1560, National Merit Commended Scholar, National AP Scholar, self-studied AP Computer Science A (5/5 on AP exam), MA State Seal of Biliteracy (English/French)

Experience

Student Volunteer, Woods Hole Oceanographic Institution's Autonomous Robotics and Perception Lab

July 2018-Dec 2018

Collaborated with a team of grad students, oceanographers, and software engineers to develop systems for monitoring oceanographic activity with artificial intelligence, using primarily *Pytorch* and *Jupyter Notebook*.

1. Created a pipeline utilizing a *convolutional neural network* and *unsupervised clustering algorithms* to identify plankton species based on feature extraction.
2. Used *generative adversarial networks* and *variational autoencoders* to create a latent space representation of the anatomical features of common plankton species.
3. Implemented *variational autoencoders* and *unsupervised clustering* to recognize patterns in audio from multiple coral reefs in the U.S. Virgin Islands.

Customer Relations, Maison Villate   **Summer 2019**

Worked the front-end of a high-end French bakery full-time, provided hospitable service to thousands of customers.

Skills

Programming Languages: **Interests/Specialties:**
Fluent: Python, Racket   Computer Vision, Machine Learning
Proficient: Java, Swift
Software/Libraries:
Pytorch, Tensorflow, Linux, LaTeX, Jupyter Notebook, Github, Tableau, Eclipse