

# Miles V. Vollmer

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<https://www.linkedin.com/in/miles-vollmer-192aa0223/> || <https://github.com/mvvollmer/mvvollmer>

Availability: January - June 2022

## EDUCATION

**Northeastern University** | Boston, MA

2020 - present

**Khoury College of Computer Sciences**

Candidate for a Bachelor of Science in **Computer Science with AI Concentration** (Expected Graduation: 2024)

Relevant coursework: Object-Oriented Design, Algorithms, Math of Data Models, Discrete Structures, Fundamentals of Computer Science I & II, & Intro to Math Reasoning

**Beverly High School**, Beverly, MA

2016 - 2020

*Honors* | National Honor Society, Academic Excellence in World History & PreCalculus

*Extracurricular* | Academic: Math Team (Captain), Climate Committee     Soccer: Varsity, Aztec Club, Valeo Club

## TECHNICAL SKILLS

Languages: Java, Python, HTML, CSS, R, C++

Operating Systems: MacOS, Windows, Unix/Linux

ML Packages: Scikit, PyCaret, SHAP

## RESEARCH EXPERIENCE

**Research Assistant - Evolutionary Genomics Lab, Northeastern University**

May - Sept 2021

Supervisors: PI Dr. Steve Vollmer, Postdoc Dr. Charles Roesel and PhD student Brecia Douglas

- Created and optimized machine learning models on 16s bacterial amplicon sequencing data from a coral disease system to identify bacteria associated with coral health using python-based ML packages including scikit and pycaret.
- Developed a Random Forest Model with 99% disease prediction accuracy.
- Identified key features (and novel putative bacterial pathogens) associated with disease using SHAP values.
- ML results are currently being prepped for a multi-author publication with me as co-author.

## WORK EXPERIENCE

**After School Care Provider & Camp Counselor**, Lynch Van Otterloo YMCA, Marblehead, MA

Jan - Sept 2020

- Planned, led, and implemented educational and recreational programs for K-6 graders; CPR/First Aid trained.

**Soccer Referee**, US Officials and Essex County Youth Soccer Association

2017 - 2020

- Refereed youth club and town soccer including elite NPL club level.

**Storefront Employee**, CVS Pharmacy, Marblehead, MA

Sept - Dec 2019

- Delivered quality customer service, managed the front of store and stocking.

## INTERESTS

Playing and watching soccer(Chelsea fan), Scuba Diving, Surfing, Chess, and watching True Crime shows on Netflix.

## REFERENCES

Available upon request.