Emma Waddell (Portfolio)

Full Stack Software Engineer

Queens, NY, 11385
(860) 655 2887
emmarwaddell@gmail.com

Work Experience

Full Stack Software Engineer / Better Mortgage
July 2022 - Current, 3 World Trade Center, New York, NY

- Developed backend applications using Typescript, Javascript, Node.js, & Python
- Built frontend features using React.js, Ember.js, & Next.js, as well as HTML5
- Integrated with vendors using REST APIs, & Swagger/OpenAPI documentation
- Built relational database using TypeORM & Nest.js, and admin dashboard
- Leveraged Docker, Amazon EC2, Postman, Datagrip, Mocha, and Datadog

Technology Director and Radio Host / WNYU Radio
January 2020 - June 2021, NYU, New York, NY

- Updated and maintained the website (Ruby on Rails) and live stream
- Created tutorials for station members to host their shows remotely during COVID

Software Designer and Developer / Trinity College Neuroscience Department
June 2020 - June 2023, NYU, New York, NY

- Digitized the MIST diagnostic test to aid with administering remotely (p5.js)
- Collected user data to be used in the diagnostic process

Research Grants

Honors Undergraduate Thesis

- Built a Q-Learning system in SuperCollider that can generate beats of varying intensities while following an acoustic performer.

Presented at: NERD Summit ('23), Harvestworks ('23), Ensemble Evolution ('22)

NYU Gallatin Dean's Award for Summer Research

- Created a procedurally generated platformer game in Unity. User choices are fed into a neural network in Pure Data which generates a live soundtrack.

Presented at: IAWM Conference ('22), NYU Gallatin Keynote Research Conference ('21)

NYU Gallatin Undergraduate Research Fund

- Composed and recorded an album and interactive website in p5.js consisting of four songs based on ornithological data (also used Java, Max/MSP/Jitter).

Presented at: PHREATIC! exhibit on Governors Island ('21), NYC Audubon House ('22)

Education

New York University Gallatin (September 2018 - May 2022, GPA: 3.8)
BA Computer Science and Music Composition, Minor in Mathematics

Graduation Awards: Undergraduate Interdisciplinary Academic Excellence, Founders Day Award

Coursework: NLP, Computer Vision, Parallel Computing, Operating Systems, Computer Simulation