

Work Experience

Software Engineer

Sharp Notions, LLC

Fairport, NY (Remote)

eClimateNotebook [archive.is/EAUYD]

December 2021 — Present

- Lead full-stack, white-label rewrite of client's live, legacy (20+ yrs) big data PHP software with 1000+ active customers seeking to monitor > 1 billion environmental data records in real-time; spearheaded on-time launch of product with vendor-specific branding to satisfy government contract.
- Addressed 700+ feature and bugfix Jira tickets over client's flagship product development lifetime; discovery of feature requirements through meetings with non-technical product owner, using user stories and personas to express functional needs.
- Improved server performance with 96% reduction in API response time (from 2 seconds to < 0.1ms), through optimization of 40+ SQL queries targeting N+1 scenarios, adjustment of JSON payload compression settings, and refactoring of more than 200 PHP classes into modular interfaces.

Leveraged skills: PHP, Laravel, TypeScript, JavaScript, React, Vue, Vite, Atlassian Jira, SQL, MySQL, Docker

Data Science Intern

The Nielsen Company, LLC (US)

New York, NY (Remote)

R&D: Next-Generation Cross Media Methodologies (NXMM)

June 2021 — August 2021

- Applied software engineering principles and predictive analytics research to time-series forecast tasks as a member of the Data Science R&D team focusing on Next-Generation Cross Media Methodologies (NXMM).

Leveraged skills: Python, Tableau, databricks, Apache Spark, Hive SQL, scikit-learn, Jupyter Notebook

Game Developer, Internship

Teachley, LLC

New York, NY (Remote)

Addimals EDU [archive.is/TkEVY]

May 2020 — January 2021

- Contributed to grant-funded port of existing educational Cocos2d mobile IP to WebGL platforms as a developer using Unity3D (C#); interpreted the original Objective-C source using Xcode to investigate existing behaviors.
- Completed 10+ gameplay features targeting children learning 4th grade math; utilized beanstalk repositories for collaborative software development and `git`-powered source control versioning; implemented state machines controlling core gameplay loop.

Leveraged skills: Cocos2d, Objective-C, C#, Unity3D, WebGL, Apple Xcode, Git VCS

Software Developer

Rochester Institute of Technology

Henrietta, NY (On-Site)

MAGIC Spell Studios

June 2019 — September 2019

- Developed cross-platform AR/XR experience using Unity3D designed to train clients on proper fume hood procedure; modeled particle interactions in a virtual biological safety cabinet with full-body and hand motions provided by Kinect and LeapMotion sensors.

Leveraged skills: Unity3D, Particle Simulations, Physics, Kinect, Leap Motion, Motion Tracking, AR/XR

Education

Rochester Institute of Technology

Henrietta, NY

MS Data Science GPA 3.55

December 2023

BS Game Design & Development GPA 3.50 cum laude

May 2020

Prep for Prep

New York, NY

Contingent XXXI (31st Cohort)

January 2011 — January 2015

Other Experience

International House, Housing

Rochester Institute of Technology

Henrietta, NY (On-Site)

President

February 2017 — February 2018

Public Relations Officer, Webmaster [archive.is/y1kb9]

February 2016 — February 2017

- Redesigned organization website with Bootstrap 4 for a mobile-first, responsive experience.

Leveraged skills: HTML, JavaScript, Bootstrap 4, Web Development

Skills & Competencies

Languages: TypeScript, JavaScript, PHP, SQL, C#, Python, R, Java, C++, Objective-C, Visual Basic for Applications (VBA)

Frameworks: Laravel, NodeJS, Electron, Apache Spark, WordPress, Processing

Software: MS Office Suite, Adobe Creative Cloud Suite, Heroku, Amazon Lightsail, DBeaver, Tableau, Power BI