

PENG-YUAN (EMILY) HUANG

📍 San Francisco Bay Area | ☎ (213) 300-8540 | </> [Personal Website](#)
✉ pengyuanhuang1@gmail.com | [🌐 linkedin.com/in/py-emily-huang](https://www.linkedin.com/in/py-emily-huang) | [🐙 github.com/emily61268](https://github.com/emily61268)

Authorized to work for any U.S. employer (U.S. Permanent Resident)

EDUCATION

University of Illinois at Urbana-Champaign

Master – Computer Science

Aug. 2021 - May 2023 (Expected)

Auburn University

Bachelor – Computer Science

Aug. 2018 - May 2022

GPA: 4.0/4.0 (Dean’s List)

Relevant Courses: Data Structures, Algorithms, Software Engineering, Database, Web Development, Mobile Application Development, Operating Systems

TECHNICAL SKILLS

Languages: Java, Python, C#, SQL/NoSQL, JavaScript/TypeScript, HTML/CSS, Swift, PowerShell, PHP, C/C++

Frameworks/Tools: Git, React.js, Node.js, Express.js, Heroku, Postman, Jira, Chrome Developer Tools

Cloud: AWS, Azure

Databases: MySQL, SQLite, MongoDB, DynamoDB

EXPERIENCE

Software Engineer Intern

Capital One

Jun. 2021 – Aug. 2021

Remote, United States

- Worked with Automation team to develop an automatic procedure that optimized the AWS Domain Controller rehydration process using **Python**, **AWS Lambda** and **PowerShell** scripts, resulting rehydration runtime **reduced by 80%**.
- Established the automatic rehydration procedure with **AWS**, especially by utilizing **Amazon EC2** and **SNS** to trigger each step in the rehydration sequence of events.
- Read and documented **over 20K lines** of source code in order to understand the rehydration process and implement the procedure.
- Built an internal portfolio website in **React.js** as front-end, and developed back-end service in **Node.js** & **Express.js**, which connects to **AWS DynamoDB** to serve real-time data via **RESTful APIs**.
- Utilized a **Docker** container to deploy the portfolio website.
- **Leveraged knowledge:** AWS, Python, PowerShell, React.js, JavaScript, HTML/CSS, Node.js, Docker, Jira, Git

Software Engineer Intern

Bentley Systems

Jan. 2021 – Apr. 2021

Remote, United States

- Improved website performance by **25%** by identifying, investigating, and resolving front-end and back-end issues.
- Implemented a new feature that allows user to view, add, and modify a model of a selected construction site location in Inspection using **React.js** and **TypeScript**.
- Worked closely with both Inspection team and Construction team to maintain or update the existing codebase on **Azure** to ensure overall usability experience for customers.
- Fixed **over 50** defects and contributed **over 10K** lines of code in the codebase.
- **Leveraged knowledge:** in Full Stack Web development, CSS, JavaScript, TypeScript, React.js, C#, Git, debugged using Visual Studio and Chrome Developer Tools, and updated codebase on Azure.

FEATURED PROJECTS

Web Browser – Qroxx: [Demo](#)

- Developed a three-tier, graphical, event-driven desktop application using **C#**, building a simple web browser that included basic functionality, such as navigating to previous/next page, refreshing a page, bookmarking, etc.
- Implemented a relational database using **SQL** to store and retrieve user’s bookmarks and browsing history.
- Utilized: C#, .NET, SQL, MySQL, Visual Studio, Git

Multi-functional Web Service – Quotes & Efficiency: [Demo](#)

- Created dynamic web pages using **Node.js** and **Embedded JavaScript templating (EJS)**.
- Added a feature to display users’ current local weather condition using **JSON** to parse data retrieved from APIs.
- Incorporated **Mongo DB Atlas** to store customized lists persistently in the online database.
- Generated celebrity quotes for entertainment using **AJAX** to pull data from Quotes API.
- Utilized: HTML/CSS, JavaScript, jQuery, Node.js, Express.js, JSON, AJAX, Embedded JavaScript templating (EJS), NoSQL, MongoDB Atlas, Local Persistent Data, Git, Mailchimp, Heroku

Music Streaming Web Service – FavMusic: [Demo](#)

- Designed web pages using **PHP**, allowing users to browse, play and search music.
- Equipped with functionalities including play, pause, shuffle, and adjusting volume etc. using **jQuery**.
- Incorporated persistent data storage to store user account information, album/track information, and user-customized playlists.
- Utilized: PHP, JavaScript, jQuery, AJAX, JSON, SQL, Git, HTML/CSS, Clear DB, Heroku