Zhiyu Long

520.312.2824

https://www.zhiyulong.com

allaboutalon@gmail.com

Summary

Zhiyu Long is pursuing a Master's degree in Computer Science at Northeastern University, Silicon Valley campus. She enjoys developing games, web applications and mobile apps. She's comfortable with Java, Kotlin, Python, C, and Javascript. Zhiyu has worked on several school projects that have given her experience with software development processes.

Education

Master degree: Northeastern University, Silicon Valley, CA, USA
- **Master of Science: Computer Science**   01/2021 – 05/2023
  - **Major:** Computer Science

Bachelor degrees: University of Arizona, Tucson, AZ, USA
- **College of Science**   08/2016 – 12/2020
  - **Major:** Computer Science
  - **Minor:** Information Science, Technology & Arts
- **College of Soc & Behavior Sci**   08/2018 – 12/2020
  - **Major:** Information Science & Technology
  - **Minor:** Finance

Experience

Peapod Digital Labs: Chicago, IL, USA
- Software Engineer Co-op   01/2022 – 06/2022
- Software Engineer Co-op   09/2022 – 12/2022

Amazon: Seattle, WA, USA
- Software Dev Engineer Intern   06/2022 – 09/2022

Skill

- **Languages**: Java (Proficient), Kotlin (Familiar), Python (Familiar), JavaScript, C#, SQL, C, HTML/CSS
- **Framework & tools**: SpringBoot, Angular, AWS, GCP, NodeJS, Vue, Docker, Django, Git, Unity, MySQL
- **Courses Taken:** Object Oriented Program Design, Algorithms, Database Design, Cloud Computing, Game Development, Green Computing, System Programming and Unix, Statistic Foundations, Software Development, Dealing with Data, Operating System, Program for Informatics App, Mobile Application Development, etc.

Project (more at https://www.zhiyulong.com/blog)

Image Editor and Cross Stitch Application (Java, Java Swing, MVC, Object Oriented Design)
- Designed the application architecture by following the **Model-View-Controller** model;
- Using **Java Swing** to build the interactive GUI, generated and customized the pixelated image to the Cross Stitch Pattern;
- Implements the image processors such as blurring, sharpening, color transformation, filter, pixilation, and mosaic using **Java**;

Jin Music Sharing Web Application (JavaScript, Vue.js, NodeJS, MongoDB, Nginx)
- Designed an interactive web page using **JavaScript** and **Vue.js** for users to upload music video and make donations;
- Implemented the backend server using **JavaScript** and **NodeJS** framework to handle **HTTP** requests and responses;
- Deployed the web application to the **AWS EC2** instance;

Hiking Trail Searching Android App (Java, Android Studio, AWS, Firebase Database, GPS locator)
- Utilized **Firebase** database to store user information and trails data to enable user to access their data anywhere and anytime;
- Implemented the business logic layer in **Java** to allow user to upload trail posts and review on other's post
- Developed the location based trail **recommendation** system with the help of **GPS** locator.

Educational Game designed to help people explore their preferred learning approach (Unity, C#, Nginx, GCP)
"Cloud" - 2D game, **"Sentient Beings" - 3D game (C#, Unity, Nginx, GCP)**
- **Research** on different types of learning approaches and how they are related to people's personalities;
- Designed all the game components using **Photoshop** and **Aseprite**;
- Designed and implemented the whole game with **Unity** game engine using **C#**;
- Deployed the game on **Google Cloud Platform** using **Nginx** web server;