SeungU Lyu

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(425) 321-8512

Junior CS student looking for software engineering internships

EDUCATION

Olin College of Engineering   **Needham, MA**
Bachelor of Science in Engineering with Computing   Aug 2018 – May 2023
- Cumulative GPA: 3.95 / 4.00
- Recipient of 4-year, 50% Olin Merit Scholarship
- Relevant Coursework: Machine Learning, Software Design, Data Structures and Algorithms, Fundamentals of Robotics, User-Oriented Collaborative Design

EXPERIENCE

1006 Games   **Busan, South Korea**
Lead Game Designer   Feb 2020 – Aug 2021
- Led a team of three game developers to publish multiplatform indie games, available on Google Play Store, itch.io, and Crazygames.com (8.9/10.0 out of 47 ratings).
- Fostered a culture of agile iterations by regularly sharing UX prototype that drove the team's North Star vision.
- Managed scope and feature requirements for each development milestone.

OCCaM (Olin College Crowdsourcing and Machine Learning) Lab   **Needham, MA**
Undergraduate Student Researcher   Jun 2020 – Aug 2020
- Participated in Invisible Map Project, an accessible iOS app for people who are blind to navigate inside buildings guided by augmented reality without dependency on external devices.
- Developed "Save Location" feature that allows users to pre-register important locations inside the buildings as reference pointers during future navigations.

Olin College Human Interactions Robotics Laboratory   **Needham, MA**
Undergraduate Student Researcher   Sep 2018 – Oct 2019
- Participated in various human-robot interaction research including Robot Chess Competition, and UR5 Robot Simulation (Gazebo, open-source 3D robot simulator).

PROJECTS

SPLUX & Other Game Projects   Feb 2020 – Aug 2021
- Developed UX and frontend for SPLUX, KMLA72, and ELIC (Unity C#).
- Defined key project requirements such as: class structures, settings, assets, budget, rules, flow, and interface; accelerated project execution by creating scheduled guidelines and effectively collaborating with the teammates.
- Enhanced FPS performance by 50% (from 180 to 270) by custom shader creation, memory resource management and refactoring class structures.

Invisible Map Project   Jun 2020 – Aug 2020
- Utilized Apple ARKit and April Tag to calculate the user's relative position from the tag (save location feature to pre-register navigation reference pointers)
- Created UI/UX mocks that meets extensive accessibility requirements.

Robot Chess Competition   Sep 2018 – Dec 2018
- Developed a robot chess player by integrating camera vision system with a UR5 robot arm via serial communication (Python, ROS, OpenCV).
- Designed algorithm that outputs the next move for the robot from the image input of the chess board

LEADERSHIP AND ACTIVITIES

32nd Air Defense & Control Group, Air Defense Identification Team   **Daegu, South Korea**
Sergeant, Squad Leader   July 2016 – July 2018
- Supported identification of unidentified aircraft in Korea Air Defense Identification Zone with the cooperation of China/Japan Air Force.

SKILLS

- **Programming Languages**: C#, Python, Swift, Java
- **Tools & Technologies**: Unity, SOLIDWORKS, ARKit, ROS, OpenCV