Swoyen Suwal

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SUMMARY

A passionate and self-motivated recent software engineering graduate with strong problem-solving and technical skills. Strong knowledge of software development from practical internships and software jobs.

EXPERIENCE

Research Assistant | Software Engineering

University of South Australia   **December 2020 - February 2021, Adelaide, South Australia**

· Implement a Virtual Reality Navigation System in Unity for 360 Photo scene.
· Developed a 3d Geometry Modelling Tool to create structures in the scene.
· Implement Navigation Techniques for locomotion within the scene.

Research Assistant | Software Engineering

University of South Australia   **March 2020 - December 2020, Adelaide, Australia**

· Implemented a Virtual Reality System for Genomic Data Visualisation in Unity using C#.
· Upgraded the existing system to include more hand-based interaction techniques.
· Researched existing 2d Genomic Data Visualisation techniques and ported them to 3d.

Mixed Reality Lab Developer - Internship

CSIRO Data61   **November 2018 - March 2019, Clayton, Victoria**

· Implemented novel visualization with point clouds using HoloLens in the Mixed Reality Lab demonstrating spatial alignment.
· Increased interoperability of CSIRO's Workspace platform by integrating HoloLens with the creation of a software plugin.
· Developed software for visualizing the 3D data scanned from a Kinect in the HoloLens.

IT Analyst

Supreme Kitchens   **May 2018- November 2018, Pooraka, South Australia**

· Optimized cabinet building process in CAD software by automating tasks through scripts reducing the time taken for designing cabinets.
· Communicated with stakeholders to transition to new software, integrating services in the cabinet manufacturing process.
· Gathered and Analysed System Requirements and analyzed bottlenecks from legacy software improving efficiency in the new software.

PROJECTS

AR Extension To HEVS | Honours Project | March 2019 - November 2019

· Added Augmented Reality (AR) Support to HEVS: a display framework supporting collaborative, in collaboration with UNSW.
· Designed and created a system for creating scenes with multiple displays (monitors, AR headsets) which allowed researchers to create a multi-display scene without much configuration.
· Developed a working prototype functionality to demonstrate the capabilities of combining AR with physical displays.

EDUCATION

Bachelor of Software Engineering with Honours

University of South Australia, Adelaide · South Australia · 2019 · First Class Honours

INVOLVEMENT

Study Support

University of South Australia, Adelaide · Study Help PALS · July 2018 - November 2018

· Provided friendly, informal study support to students at drop-in sessions on the campus.

Student Mentor

University of South Australia, Adelaide · UniMentor · February 2019 - June 2019

· Provided mentorship to new UniSA students assisting them with their university transitions by providing guidance.

SKILLS

Unity, C#, Java, Python, 3d-modelling, Full-stack Web Development, AWS, Azure