Yousif A. Aldolaijan

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Education

Bachelor of Science in Computer Science

August 2015 - December 2018

University of Southern California, Los Angeles, CA (USC)

• Related Coursework: Operating Systems Development, Software Design, Artificial Intelligence, Algorithms and Theory of Computing, Data Structure and Object Oriented Design, and Video Game Programming.

Internships and Research

Google Software Engineering, Tools and Infrastructure Internship

May 2018 - August 2018

- Generating and enforcing access control lists that restrict remote procedure calls within an integration testing framework. This feature allows developers to easily verify if their services are hermetic.
- Programmed using Python, internal frameworks, and internal configuration languages.
- Developed under the guidance of Robert Dryke.

Distributed Systems Experimentation Framework (DSEF) - Networked Systems Lab at USC Summer 2016, 2017

- Developed DSEF which easily runs experiments on different types of distributed systems while measuring the throughput, latency, and the performance of the machines running the distributed system.
- Programmed using Python and Jupyter Notebook (IPython Notebook).
- Collaborated with Sam Thomas and Roberto Gonzalez and under the mentorship of Dr. Wyatt Lloyd.

Projects

Controls Lead - USC Hyperloop Design Team

Aug 2016 - May 2018

- Lead the controls team to develop the autonomous control system of the USC hyperloop pod.
- Built using Texas Instruments Hercules MCU and programmed in C.
- Communication between subsystems was done using CAN, TCP/IP, UDP, GPIO, and ADC.
- Built a Ground Control System to provide remote telemetry and emergency manual control of the pod.

Know It All - University Related Rating and Reviewing System

Aug 2017 - December 2017

• Developed a website, with 4 other students, that allows users to rate and review places, classes, and professors at our university. Made using Python, Django Web Framework, PostgreSQL, Elasticsearch, and Scrapy.

MyPage - Static Personal Websites as a Service

Jan 2017 - May 2017

• Developed a web based service, with 3 other students, that hosts static websites and provides an interactive GUI to easily edit these websites. Made using Java, Tomcat, MongoDB, HTML, CSS, and Javascript.

Endless Race - Racing Game

Jan 2017 - May 2017

• Developed a racer game using Unreal Engine 4 where players navigate through a tube while avoiding obstacles and competing against multiple AI racers.

Participation

MEGA 24-Hour Game Jam

Sep 2015

• Developed a Unity game about a water droplet escaping from a cave by transforming between the three physical phases: solid, liquid, and gas. Phases are simulated using fluid mechanics.

Association for Computer Machinery (ACM), USC Chapter

Sep 2015 - December 2018

• Organized and participated in multiple networking and workshop events.

Makers of Entertaining Games Association (MEGA), USC

Sep 2015 - December 2018

• Participated in multiple game development and workshop events.

Skills

- **Programming:** Python, C, C++, Bash, Javascript, HTML, CSS, LabVIEW.
- Technologies: Git, Linux, Python Django, PostgreSQL, Unity, Unreal Engine, LaTeX.

Achievements and Awards

USC Viterbi School of Engineering Dean's List

Spring 2016, 2017, Fall 2017

• KAUST Gifted Student Program (KGSP) Scholarship - Recipient

May 2014 - December 2018