

# Derek DeLizo

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## Software Developer

Highly accomplished, resourceful, and detail-oriented software developer with a solid acumen in clarifying architectural specifications and aligning with hardware designs for concurrency in products. Have well-rounded engineering experience in design processes, developing prototypes, and design verification.

## SKILLS

<b>Programming:</b>	Java, Python, Javascript, C#, C++
<b>Frameworks:</b>	React, Hugo
<b>Applications:</b>	Git, Android Studio, Visual Studio, IBM RTC
<b>Controllers:</b>	FPGA, Raspberry Pi, Arduino
<b>Platforms:</b>	Linux, Windows, Android

## PROFESSIONAL EXPERIENCE

### Systems Engineer | PACCAR Inc. | 2019 to PRESENT

- Communicating with global stakeholders to verify the logic of distinct control systems to capture hardware/software requirements and design behavior
- Reviewing engineering specifications and providing feedback if a proposed solution either requires more clarification or is incompatible with the current system.
- Supporting the release of the PACCAR Digital Display by developing new functions in C++ using industry best practices to ensure efficiency and performance.
- Resolving defects by performing root cause analysis to determine the source for software and hardware systems, then gathered appropriate stakeholders to find a solution

### Lead Game Designer | Digital Future Lab | 2015 to 2018

- Facilitated better collaboration amongst team members by introducing an internal review process that encouraged designers to share ideas and provide feedback
- Influenced a change in the design process by introducing a method for documenting game mechanics and levels that helped the studio used make decisions for the final product
- Introduced new unity tools that enabled designers to move from early prototypes to final designs twice as quickly.
- Represented the company at major industry events by running a demo booth on the show floor and taking part in panels around game design.

## ACADEMIC PROJECTS & RESEARCH

### SMART Glove – Electrical Engineering Capstone | University of Washington Bothell | 2018

- Developed the Arduino firmware using C and the laptop application using python based on the architecture.
- Utilized libraries provided by the supplier to achieve wireless data transfer between an Arduino and Laptop over Bluetooth.
- Designed and validated a printed circuit board (PCB) to meet specific design requirements for durability, weight, and size.

## **Localizing Crow Vocalizations in Social Aggregations | University of Washington Bothell | 2017 to 2018**

- Worked with the Biology and Engineering departments to advance studies regarding the behavior and language of crows.
- Designed and developed a GUI Program in Matlab for Biologists enabling audio analysis of crow calls using tools such as spectrograms, data tables, and localization plots.
- Instructed students how to use version control software to improve workflow and task tracking.

## **Controller Development for Vulcan Inc. | University of Washington Bothell | 2016 to 2017**

- Contributed to the design and development of a Mixed Reality Controller prototype for the Holodome at the Museum of Pop Culture.
- Established a multi-phase test plan to validate the functionality of each sub system before integration to minimize defects for project release.
- Set up a process that translated real world rotation and position values to the Unity coordinate system, enabling users to interact with the virtual environment.

## **EDUCATION**

### **University of Washington Bothell, Bothell, WA: 2018**

Bachelor of Science – Electrical Engineering (GPA: 3.62)

Relevant Coursework: Microprocessor System Design, Digital Circuits and Systems, Electronic Test and Measurement, Continuous-Time Linear Systems, Discrete-Time Linear Systems, Data Structures, Algorithms & Discrete Mathematics

## **VOLUNTEERING**

### **PACCAR United Way Charity Week – Fundraiser**

Coordinated with event organizers to boost participation, managed \$150 budget, conceived and constructed games to maximize savings, and raised \$1,550

### **iUrban Teen – Volunteer**

Led a group of 6 students to breakout sessions for the STEM-o-Ween Summit that focused on introducing underrepresented teen to industry paths in the field of STEM.

## **HONORS & AWARDS**

Eagle Scout – Boy Scouts of America