

# Lucas Kim

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## Project

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### Engineering Design Project, Eye-Tracking System to Prevent Distracted Driving, (Fall 2018)

- Designed a plastic, 3D printed box that can hold a camera, an accelerometer, and a raspberry pi with openings for the pi's ports.
- Modeled design concepts of the 3D printed box were drawn using hand-drawings, Google draws, and AutoCad.
- Helped design a code for the accelerometer that allowed our system to detect when the car is moving. When the car is moving, we designed a code to detect the driver's face using the Viola Jones algorithm which allowed our system to determine when the driver's pupils strayed away from the camera's view. The system would then resonate a beeping noise to alert the driver when their pupils are away from the camera for too long.

## Education

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### University of Virginia – Charlottesville, VA

Bachelor of Science in Computer Science expected May 2021

Junior Academic Level

Overall GPA: 3.4/4.0

**Completed Coursework:** Using Data Structures, Programming W/ Data Structures, Computer Organization and Architecture, Software Development Essentials, Discrete Math, Human Computer Interaction in Software Development, Multivariable Calculus, Ordinary Differential Equation.

**Coursework for [Fall 2019]/[Spring 2020]:** [Theory of Computation, Operating Systems, Probability], {Algorithms, Machine Learning, Artificial Intelligence}

## Work Experience

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### Research Project (Exploring Mobile Ad Hoc Networks (MANETs) to Enable Connected Transportation Services), University of Virginia Charlottesville, VA – Research Assistant

October 2019 - Present

- Will be working with other Undergraduates and Graduates to help implement different safety applications for connected vehicle scenarios where we will utilize mobile ad-hoc network infrastructure.

### Alexandria Capital, Washington, D.C. – Office Intern

December 2017 - January 2018 & December 2018 - January 2019

- Worked on various administrative tasks for multiple team leaders.
- My job consisted of, but not limited to, filing tax returns, scanning and organizing tax files, mailing files, shredding confidential files, creating postage sticker templates, etc.

### Self Employed Tutor, Annandale, VA – College Level Tutor

June 2018 - August 2018

- I started a tutoring service within the NVCC campuses.
- Tutored a couple of students in Pre-Calculus, Chemistry 1 and Calculus 1 & 2.

## Technical Skills

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Java  
C  
C++  
Github  
Microsoft Office

Linux  
Windows  
Python  
SQL  
Javascript