

Seong Kweon (Alex) Hong

seongkwh@andrew.cmu.edu | github.com/alexhongs | alexhongs.com

EDUCATION	Carnegie Mellon University , Pittsburgh, PA B.S. in Electrical and Computer Engineering Major in Human Computer Interaction Overall GPA: 3.89 / 4.0	Expected: Dec 2020
RELEVANT COURSES	Programming Usable Interfaces, Fundamentals of Programming, Structural Design of Digital Systems Cognitive Psychology, Signals and Systems, Introduction to Computer Systems, Humanoids	
SKILLS	Computer Languages: C, Python, html, JavaScript, Java, Swift, C# Applications: Unity, Github, MatLab, Arduino	
PROJECTS	Pre-prosthetic Rehabilitation Games Development , <i>Research Assistant</i> , Pittsburgh, PA Dec. 2016 - Aug. 2017 <ul style="list-style-type: none">Developed an interactive exercise game app, controlled with arm muscles, for an effective rehabilitation of pre-prosthetic arms.Assessing limitations of focus group patients, designed UI game wrapper that plays 3 games.Prototyped Flappy Bird with a new Balloon mode and responsive visual feedback such as glowing bubbles and hand gesture icons on the peripheral vision.85% of 20+ patients found the games healthful and 10 out of 14 users reported they wanted to play the games again.Android, Unity, UI Design, Virtual Reality, Pattern Recognition, Illustrator, Sketch Teleoperation of Baxter Robot in VR , <i>Research Lead</i> , Pittsburgh, PA Jan. – May 2017 <ul style="list-style-type: none">Allowed controlling Baxter remotely in virtual reality as it imitates user's arm movement, which is captured by the Leap Motion camera.Enabled virtual reality live-streaming from dual-lens camera on Baxter, to a web page on phone, using the mjpg-streamer framework.Virtual Reality, Python, Raspberry Pi, Leap Motion Music Game Development in Python , <i>Project Lead</i> , Pittsburgh, PA April 2016 <ul style="list-style-type: none">Developed <i>Tap112</i>, a 3D music game in a team of four, where the user hits the generated balls with correct timing as music plays.Created the entire game interface in 3D, animating balls from parsed notes in a music file.Won the <i>Best Game</i> prize in a Hackathon of 180+ people.	
EXPERIENCE	Medical Sergeant , Republic of Korea Army Sept. 2017 - May. 2019 <ul style="list-style-type: none">Provided first aid and medical care for injured soldiers, assisting nurse officers, doctors, and 30+ patients daily. Teacher's Assistant , Carnegie Mellon University May - July 2017 <ul style="list-style-type: none">Lead labs and office hours for 46 pre-college students, reviewing critical concepts for 20+ hours weekly for an introductory Electrical and Computer Engineering class.Resulted in students going from zero to little experience with electrical circuits to having a solid understanding of the mathematics behind circuits. iOS Development Intern at TeddyMozart , Brooklyn, NY Sept. 2016 - Feb. 2017 <ul style="list-style-type: none">Developed an app that records, plays songs and bedtime stories for children through a Teddy Bear.Web-scraped songs and designed the record and song play pages, using the AVFoundation framework.Published the TeddyMozart app on App Store, increasing number of users by 150+.	
HONORS	Hack112 Hackathon, <i>Best Game prize</i> from <i>Tap112</i> Dean's List: Carnegie Institute of Technology	April 2016 Fall 2015 - Fall 2016