

EDUCATION

University of Pennsylvania, Computer Science for Software Development, edX Professional Certificate | Sept 2019 - Dec 2019

Notable courses:

- SD1x: Software Development Fundamentals
- SD2x: Data Structures and Software Design
- SD3x: Algorithm Design and Analysis

University of Waterloo, Faculty of Engineering, BAS | Sept 2013 - Aug 2019

- Principal Entrance Scholarship - Academic achievement
- Excellent Standing - 80% or above cumulative average
- Dean's Honours List - Top 10 GPA of the class

PROJECTS

Web3D - Interactive 3D Modeling Application on Web Browser | January 2019 - present

Tools used: HTML, CSS, JavaScript, GitHub Pages, three.js Library

- Utilized an open-source JavaScript project that wraps around WebGL components to enable easy-to-access 3D modeling environment on browsers

Robotic Fabrication Workshop, UBC | October 2019

- Participated in the 5 day workshop that produced a free-standing outdoor structure at the main Boulevards of the UBC Campus from scratch
- Got immersed in the digital fabrication process which involved parametric design in Rhino + Grasshopper and 5-axis robotic arm equipped with a CNC router

Waterloo Engineering Competition, Smart City | July 2019

First Place in Consulting Category

- Produced and presented the competition winning proposal with intensive constraint on budget and time
- Devised simple implementation that cause little next to no disruption to existing operation of the University of Waterloo Campus, yet have immediate application and enormous future potentials

Portfolio Website | November 2018 - December 2018

Tools used: Bluehost, WordPress, HTML, CSS, Photoshop

- Created a simple WordPress website hosted on a commercial hosting service
- Customized the theme to suite mobile-friendly layout
- Search Engine Optimization using a WordPress plug-in

Baton, Mobile Application | April 2018 - August 2018

Tools used: Firebase, GitHub, Bubble platform, Google Map API, Google AdSense

- Collaborated in a team of 3 self-taught enthusiasts to develop functioning prototype for on-demand service app
- Designed responsive layout that adapts to various screen sizes
- Utilized Google AdSense to promote the service through paid advertisement

Excellent references available upon request

SKILLS

Programming Languages:

Java, Python, JavaScript, HTML, CSS

Tools

Git, Android Studio, Revit, Rhinoceros, Grasshopper

Design

Illustrator, Photoshop, InDesign, 3D Printing, Lasercutting

Learning

WebGL, Unit testing, Agile methodology, Software Life Cycle, Project Management

ACHIEVEMENTS

Innovation OnBoard

Semi-finalist

Waterloo Engineering Competition

First Place

Samsung x Dezeen Ambient Mode Design Competition

Top 15

Co-op Student of the Year

Nomination

Dean's Honours List

Top 10 GPA in class

Engineer of the Future Fund

Startup funding

International Experience Award // Scholarship

President's Scholarship

Entrance Scholarship

COMPETITIONS

Doon Pioneer Park Community Center Public Art Competition October 2019	First Place
<ul style="list-style-type: none">• Produced sinuous design through parametric modeling tool in Rhino and grasshopper• Currently examining outdoor wooden details for fabrication later this year	
Capital Riverfront Competition, National Capital Commission April 2019	First Place
<ul style="list-style-type: none">• First place winner of the competition and honored for Best Original Design Idea• Led a team of 3 students to design landscape and urban design proposal for landmark location in Ottawa• Attended sponsored trip to Ottawa for presentation at Urbanism Labs	
Waterloo Legacy Project, University of Waterloo May 2017 - November 2018	First Place
<ul style="list-style-type: none">• First place winner of 3 stage design competition• Construction finished in November 2018, attracting 12,000 visitors on the opening day• Led core team of 4 students and dozen others through the process to achieve iconic and feasible design solution for a major outdoor space on the University of Waterloo Campus	
SSEF Steel Design Competition, Canadian Institute of Steel Construction October 2017	First Place
<ul style="list-style-type: none">• Distinguished as the recipient of Award of Excellence (first place)• Sponsored trip to Calgary to attend Canadian Institute of Steel Construction 2017 conference• Led structural and conceptual design in a team of 3 students	
Ocean Heights, Super Skyscrapers 2014	First Place
<ul style="list-style-type: none">• Exhibited at Chicago Biennale 2015 as a part of partner program - International Perspectives• Rendered views and conceptual design using Rhinoceros 5.0 and Photoshop	

OTHER ACHIEVEMENTS

Masonryworx Student Competition 2017	Third Place
CISC Excellence Award in Steel Design November 2017	Scholarship
Non-Architecture Competition 2016	Finalist
120 Hours Architecture Competition 2015	Honorable Mention
Diverse Architecture Student Competition: Shelter Japan 2016	Third Place
CISC Architectural Student Design Competition 2016	Finalist
PINarchitecture Competition 2014	Top 7
Organic Skyscraper 2014 Super Skyscrapers Competition 2014	Special Mention
Association of Computer Aided Design in Architecture conference 2013	Featured project
UTown@UBC Community Grant 2011	Recipient
Zoom Film Festival - Junior Screenplay Category 2010	First Place

PUBLICATIONS

Architizer, article "The Art of Rendering: How to Render a 'Physical' Model Using Rhino and V-Ray" | January 2020
ArchDaily, featured project "Waterloo Arts Quad Outdoor Spaces" | October 2019
RAIC Festival of Architecture, Student Work Showcase | October 2019
G.ALT Publication, featured project | June 2018
Interview, KOOZA/rch | April 2018
Riverside Gallery, End of the Year Exhibition, 3A Design Studio | April 2017
EEEW-000H: Into the Grotesque, Undergrad Studio Projects Book | December 2017
Shinkenchiiku November 2016 issue, Shelter Japan Student Competition | November 2016
Chicago Biennale, International Perspectives on Rising Sea Level, presented by Kim Herforth Nielson, founder of 3XN | 2015