ARIEL JI
3B COMPUTER SCIENCE

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SKILLS

Programming Languages:
C++, C, C#, Python,
Racket/Scheme, Bash, Swift

Web Technologies: HTML5,
CSS, JavaScript, TypeScript,
Angular.js, Bootstrap,
ASP.NET Core, React,
Material Design

Development Tools: Git,
Mercurial, Unity

Design: InDesign, Photoshop,
Sketch

EDUCATION

University of Waterloo
Bachelor of Computer Science
(Minor in Fine Arts Studio)
Class of 2020
Coursework: Intro to Machine
Learning, Applied Cryptography,
Data Structures and Data
Management, Algorithms,
Operating Systems
Honours: Dean's List - Fall 2015

ADDITIONAL EXPERIENCE

Photographer / Videographer
Shoot the video series "A Bite of
Waterloo" for Daily Studio, a
student-organized media
production studio and have
more than 5,000 views on
Wechat platform

Graphic Designer
Design posters for club events at
UW

WORK EXPERIENCE

HCI Lab @ UW · Research Assistant   Jan 2018 - Present
Unity 3D, C#, Vuforia
- Implemented AR applications for wearable AR glasses such as Hololens and meta 2
- Researched solutions to solve interaction challenges associated with reading books by recognizing and augmenting image targets

ADP Canada · Software Developer   Sep 2017 - Dec 2017
React, TypeScript, CSS, Bootstrap, Material Design
- Contributed in implementation of OTG web application which is used process payroll and manage employee timecards by business owners
- Coded a web module to extract clients' payroll history from backend
- Re-designed and implemented a responsive HR Assist homepage

Imagine Communications · Full Stack Developer   Jan 2017 - Apr 2017
C#, ASP.NET Core, Angular.js, TypeScript, PostgreSQL
- Implemented new features for Graphics app which allow users to add layers and motion effects on videos
- Drastically reduced time for uploading binary data to PostgreSQL databases by developing a CLI in C#
- Built a XMP metadata extractor to preprocess .mov files
- Fixed backend server issues to improve stability

PROJECTS

UNIV [in progress]
- Co-created an iOS app for building personalized class schedules for UW students in Swift
- Utilized UW Open Data API to query course information

Breathe To Fly
- Developed a 2D game at Game Dev in a Day for players to manage anxiety by breathing
- Used sound input detected from microphones as a measure of players' breath level to control characters' movements

Chamber Crawler
- Developed a rogue-like video game where PC moves through a dungeon, gains points by attacking enemies and collecting treasure
- Implemented in C++ and adopted Object-Oriented principles and Design Pattens
- Created a graphical display which allows for user interaction