

# Alex Xie

SOFTWARE DEVELOPER · COMPUTER ENGINEERING STUDENT

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## Highlights of Qualifications

- Self-motivated developer, inspired by understanding business logic in various fields and translating them into computer programs.
- Keen problem solver who learns and adapts quickly by integrating previous knowledge and experiences.
- Clean coder who bears best practices in mind and always tries to write easy-to-understand code.
- Humble learner, encouraged by failures and obstacles, always tries the best to solve the problem independently and never afraid of asking questions when needing guidance.

## Technical Background

Programming Languages  
Runtimes and Frameworks

C/C++, C#, TypeScript, HTML&CSS, PHP, SQL  
AngularJS, ReactJS, ASP.NET, Redux, NodeJS, Material-UI, jQuery, Jest, Cucumber.js, Selenium, NestJS  
Visual Studio, MongoDB, PostgreSQL, AWS S3, Unit Testing, Postman, Docker, Unity, Git, Azure DevOps

Dev Tools

## Work Experience

### Ansys

SOFTWARE DEVELOPMENT INTERN

Waterloo, ON

May, 2021 - August, 2021

- Implemented a batch user-subscription management system through the integration between AngularJS and ASP.NET.
- Identified and performed refactoring on data encryption deficiencies in the front-end design based on MVC design pattern.
- Cooperated with fellow colleague to investigate and fix performance issue on a high-demanding api request through peer coding.
- Accomplished context-specific tasks including handling content submission requests, which involves MongoDB no-SQL operation and email communication with external submitter.

### Fundscaper Capital Inc.

FULL STACK DEVELOPER

Toronto, ON

Sep, 2021 - Dec, 2021

- Provisioned a way of generalizing and customizing frontend UI components based on object-oriented React.
- Maintained part of the automated tests on a daily basis, using data isolation and validation to reduce test fragility.
- Developed a full procedure of checking sanction status on the site's customers from fetching and parsing the list to store in our database (with PHP and MS SQL Server) to comparing our customers to the list and displaying the suspects.
- Migrated essential business logic from the current PHP code base to the company's new React application.

### Indie Travel

SOFTWARE DEVELOPER

Toronto, ON

Jan, 2021 - April, 2021

- Built the user interface for the web app's onboarding pages using React and Material-UI.
- Programmed a tool in the app's front-end to enable user to interact with another tour provider's application. Coded and tested target application's Api using asynchronous JavaScript and Postman.
- Implemented user avatar system using Amazon S3 services.
- Structured the user help center using Ghost CMS and docker.

## Project Experience

### Dreamy Duels

UNITY/C# PROGRAMMER

Online

July, 2020 - present

- Outlined and realized the action value evaluating standard for the game's AI, enabling it to be able to adapt to continuously increasing game content (cards) without specific configuration.
- Collaborated with other developers and designers to enrich playable content in the game.
- Designed generalized unit test cases based on bugs reported by players in pursuit of game reliability and pre-release fault prevention.
- Refactored part of the project to allow higher code re-usability and a player programmable editor. Contributions involve defining unit operations and effects in the game and replacing the code for previously hard-coded cards with unit functions.

## Education

### University of Waterloo

CANDIDATE FOR BACHELOR OF APPLIED SCIENCE IN COMPUTER ENGINEERING

Waterloo, ON

Sep. 2019 - present

- Relevant courses: Algorithms and Data Structures, System Programming and Concurrency, Real-time Operating System, Compilers, Database Systems, Computer Networks
- Relevant project: Multi-threaded Web Crawler, Minimum Spanning Tree