

# Alex Bie

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🌐 [www.github.com/alexbie98](https://www.github.com/alexbie98)

## Skills

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**Programming Languages:** Java, C#, Python, Javascript, C.

**Frameworks:** Android, Java Swing, Unity, Node.js.

**Tools:** Eclipse, Android Studio, Linux, Git.

## Projects

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### MTG Card Prices

*Companion Android application for popular trading card game*

- Developed mobile application to fetch & display card images and price data
- Used Android SDK to implement gallery, search, and watchlist features
- Devised backend with Python and Node.js to supply data to users

### Maze Game

*3D first-person maze-navigation game*

- Programmed game engine capable of simple, textured 3D renders in perspective projection using LWJGL (a low-level OpenGL wrapper for Java)
- Implemented recursive maze-solving algorithm, random maze generation and collision detection

### Car Database

*CRUD database application for vehicles*

- Applied MVC design pattern using Java Swing

## Experience

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### FIRST Robotics Programmer

*Robert Bateman High School*

**Burlington, ON**

*January–April 2016*

- Utilized provided libraries to interface with “RoboRio” robot controller to design control system
- Exposed to engineering environment as member of school robotics team; dealt with deadlines, bottlenecks, and version control

### Crew Member

*Hot Wok Restaurant*

**Burlington, ON**

*July–December 2015*

- Communicated professionally with co-workers and customers
- Used customer service skills to ensure satisfaction during peak hours

## Education

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### University of Waterloo

*Candidate for Bachelor of Computer Science*

**Waterloo, ON**

*September 2016–Present*

### Awards

- Randall J. Howard Entrance Scholarship
- 3.92 GPA - Term Dean's Honours List, Faculty of Mathematics