

# Ivan Nesevski

Computer Scientist • Software Developer

✉ ivan.nesevski@mail.utoronto.ca | 🌐 github.com/ivannesevski | 📧 ivannesevski.com

---

## QUALIFICATIONS

**Languages:** Java, C#, Python, JavaScript, C, C++, HTML, CSS

**Databases:** SQL, PostgreSQL, MongoDB, MySQL

**Software/Tools:** Windows, Linux, Visual Studio, Eclipse, Android Studio, Git, SVN, Mercurial, Bash

**Skills:** IT Service Management, Debugging, Unit Testing, Source Control, Networking (FTP, TCP/IP, SSH), Agile Methodologies, Web Development (Node.js, React.js, Express.js, Bootstrap, JQuery)

---

## EXPERIENCE

### Software Developer

May 2017 – August 2018

#### Spring Air Systems

Oakville, ON

- Helped maintain, test, and improve the front-end and back-end of an ASP.NET web application for specification and quoting.
- Developed robust algorithms to process 100's of product configuration options from user inputs.
- Analyzed stack traces in error reports and used Visual Studio to debug and resolve issues with the application.
- Updated a SQL database when there were changes in products or prices and prepared scripts to execute large tasks.
- Automated the generation of product schematics by refactoring code to leverage the C# AutoCAD library, allowing the removal of over 500 template CAD files from the server and saving countless hours when updating product specifications.
- Enhanced the proprietary duct building web tool using the Three.js JavaScript library to integrate 3D controls and revamped the user interface with HTML and CSS to be more user friendly. Presented the new features to the sales team and was met with positive feedback.
- Coordinated and kept strong communication with other team members on large updates as well as with supervisor to ensure a correct implementation.
- Assisted in training new co-op student.

---

## PROJECTS

### Stock Options Screener (In Progress)

- Created a RESTful web application from scratch that allows a user to search for any stock ticker and see data about all available options (bid/ask price, volume, open interest, Greeks, etc.) using the Questtrade API to retrieve data.
- Data is shown using Datatables with many custom display options like sorting, filtering, and reordering.
- Technologies used: ES6 JavaScript, HTML, CSS, Bootstrap, JQuery, React.js, Node.js, Express.js.

### Hoard Memory Allocator

- Developed a parallel memory allocator for Linux using C and ideas from the Hoard paper by Berger et al.
- Implemented individual processor heaps with a global heap to allow for high multi-threaded speeds, performing 400% faster than a sequential allocator.

### Airline Booking Mobile App

- Led a team of three to develop an android app where users can find, book, and manage flight itineraries using Java and the Android SDK in Android Studio.
- Assigned roles for team members, facilitated the development of the app by setting deadlines and arranging meetings, and tested the final product to make sure it met all requirements.

---

## EDUCATION

### Honours Bachelor of Science in Computer Science

September 2014 – August 2019

#### University of Toronto

Toronto, ON

- Graduated with Distinction for achieving a GPA above 3.2.

**Relevant Coursework:** Algorithm Design & Analysis, Software Design, Software Tools & Systems Programming, Operating System Design, Machine Learning, Computer Networks