

Alex Barkin

University of Waterloo Faculty of Engineering - 3A Mechatronics

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SKILLS

Languages:

Work experience:

- Python, JavaScript, HTML, CSS (one year)

School experience:

- Java, RobotC (four years)
- C++, ArduinoC (three years)

Tools, Technologies, and

Frameworks:

Work experience:

- ReactJS, Django (one year)
- Adobe Photoshop, Adobe Flash (five years)
- AutoCAD and SOLIDWORKS (one year)

HOBBIES AND INTERESTS

Programming:

- Developing my personal website - take a look
- Member of William Lyon Mackenzie's senior coding team

Arts:

- Self-taught embroiderer
- Weekend Photoshop warrior
- Performed in community theatre and school musicals including Nine, Gypsy and Grease

Cars:

- Proud member of Jeep Nation

ACHIEVEMENTS

Education:

- Currently ranked 9th out of 104 students
- Qualified Dean's list 3 out of 4 terms of study

Cisco FIT Certificates:

- Software Design and Development
- Interactive Multimedia
- Network Systems and Operations

EXPERIENCE



Wave HQ, Leslieville Toronto — Accounting Platform Team

Software Engineering Co-Op

- Full stack developer working on the accounting platform
- Designed software to support over 100,000 monthly active businesses
- Continuously ensured security and accuracy of financial data
- Worked on a small, fast-paced team, continuously improving our work through customer feedback



Wave HQ, Leslieville Toronto — Machine Learning Team

Software Engineering Co-Op

- Worked on a neural network to categorize financial transactions
- Set up PagerDuty alerts for the team triggered by Sentry errors
- Created the first iteration of a credit model to assess loan risk
- Used tools such as Pandas and Scikit-learn to apply unsupervised learning and dimensionality reduction for performance analysis of the neural network, documenting findings in a report



Design Plastics International, Concord Vaughan

Mechanical Engineering Co-Op

- Designed, prototyped, and built displays for stores and tradeshow
- Developed plans for displays in SOLIDWORKS, Adobe Illustrator, and Esko's CAM offering to interface with the CNC
- Used machinery such as 3D printers, CNCs, table saws, industrial printers, and other in-house tools to create intricate displays
- Worked directly with clients to develop designs and review prototypes

PROJECTS

Personal Website — alexbarkin.github.io

- Programmed a personal website in React using a Gatsby framework
- Focused on creating reusable, accessible, components leveraging semantic HTML5 tags and React component structure
- Ensured a responsive layout for use on mobile phones

Dolphinity — github.com/alexbarkin/Dolphinity

- Developed an eco-conscious game with the intention of educating the user on the effects of pollution
- Applied knowledge of object-oriented programming in Java
- Created UML and JavaDoc documentation to support the game