

Michael Eden

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WORK EXPERIENCE

NIMBAL | Algorithm Developer

May '21—Aug '21

Python, NumPy, Pandas, Docker

- Developed a novel algorithm in Python to detect clock drift between accelerometers worn across the body.
- Implemented adaptive wavelet Wiener filtering in Python to assess the quality of ECG signals in real time.
- Used React, Flask, Redis, Docker, and Celery to develop a proof-of-concept web app for queuing data-processing jobs.

TUNNELBEAR | Backend Developer

Jan '20—Apr '20

Java, Scala, AWS, Docker

- Implemented CI/CD for a Scala service with GitHub Actions.
- Increased efficiency of the two most time-consuming processes in a Scala service by a factor of 4.

HOOTSUITE | Software Developer

May '18—Apr '19

Scala, PHP, Go, React, Redux

- Built an interface for a data lake containing 17 million documents using Go, React, Redux, and Elasticsearch.
- Reduced the time to add new features for any given paid package from 2 hours to 5 minutes (95% reduction).

SIDEXF | Python Developer

Sep '17—Dec '17

Python, Qt

- Added 8 complete features (e.g., directory structuring) to the 3D-character pose library using the Python Qt framework.

IOTUM INC | Software Developer

Jan '17—Apr '17

Python, Selenium

- Automated 73 unique test cases across multiple browsers and operating systems using Python and Selenium.

PROJECTS

INQUESTS.CA

2019—Present

Express, React, MySQL, AWS

- Designed and developed a searchable repository of over 1800 records pertaining to Canadian death investigations.
- Conducted 14 interviews with death investigation professionals to perform a needs analysis.

SCRIBBLE

2020

TypeScript, Node, React

- Created a prototype of a digital whiteboard for software developers (forked from Excalidraw).
- Conducted user interviews with professional developers to perform a needs analysis and identify usability issues.

SKILLS

LANGUAGES

- Java
- Scala
- Python
- Go
- Rust
- PHP
- SQL
- JavaScript
- TypeScript
- HTML, CSS

TOOLS AND FRAMEWORKS

- React
- Redux
- Express
- Docker
- Flask
- AWS
- Firebase
- Git

PARADIGMS

- Object-oriented programming
- Functional programming
- RESTful programming
- Agile and Scrum

EDUCATION

SYSTEMS ENG | U of Waterloo

Sep '16—Apr '22

umulative GPA: 88.40

EXTRACURRICULARS

NEUROTECH | Hardware Team

Jan '20—Apr '20

Investigated solutions for creating a brainwave-detecting headset.

COFFEE 'N CODE | Project Lead

Sep '19—Dec '19

Developed and led workshops for building a React-Flask web application.

INTERESTS

Travelling, climbing, juggling, hiking, cycling, sketching.