

# Valentin Tsatskin

## **Passenger AI** Senior Software Engineer

*May 2018–May 2020,  
Remote, Toronto, ON*

- Integrated computer vision machine learning models for vehicle cabin monitoring.
- Built a remote vehicle monitoring frontend and backend using TypeScript, React, and WebRTC.

## **avec** Technical Co-Founder

*Nov 2017–Jan 2018,  
Toronto, ON*

- Co-founded a startup to drive more customers into high-end restaurants through marketing 2-for-1 food deals.
- Lead the technical effort to launch an iOS and Android app, GraphQL backend API, and website for the product.
- Architected system to have type safety across all components and their boundaries utilizing Flow, GraphCool, and Apollo.

## **Pressura** Founder

*Apr–Nov 2017,  
Waterloo, ON*

- Founded company to prevent pressure injuries in wheelchair using seniors through technological and process improvements in long-term care facilities.
- Created an IoT pressure distribution sensing wheelchair cushion with offline caching capabilities streamed to an iOS and Android app.
- Developed a machine learning algorithm to detect users performing pressure relieving exercises while sitting on the wheelchair cushion

## **facebook** Data Scientist Intern

*May–Aug 2016,  
Menlo Park*

- Analyzed usage and growth opportunities of an experimental version of the Facebook Newsfeed deployed to millions of users.
- Identified product opportunities for increasing user retention through flow analysis.
- Conducted a hierarchical clustering analysis of users' interests

## Skills

### Mobile Development

React Native, iOS, Web

### Backend Development

Node, Ruby on Rails, Postgres, MongoDB, CouchDB, Rust

### Web Development

React, TypeScript, GraphQL, WebRTC, jQuery, three.js

### Machine Learning, Image Processing

OpenCV, dlib, scikit-learn, MATLAB, Python, C++

### Data Analysis and Visualization

R, Python, SQL

### UX and UI Design

Human Centered Design, Sketch, Framer, Origami Studio

## Education

Systems Design Engineering

BASc (Hons), University of Waterloo, 2017

## Contact & More

✉ [val@valtsatskin.com](mailto:val@valtsatskin.com)

🐙 [github.com/vtsatskin](https://github.com/vtsatskin)

📞 Available upon request

🌐 <http://valentin.tsatskin.in>



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## Machine Learning Research Co-op

*Sep–Dec 2015,  
Toronto*

- Researched and developed a real-time calibration-free gaze tracking system for large interactive displays in Python and C++.
- Trained and analyzed the model utilizing OpenCV, scikit-learn.
- Worked with speech diarization and three.js for 3D visualization of collaboration in rooms.



## Software Engineering Intern

*Jan–Apr 2015,  
San Francisco*

- Led team to redesign and engineer internal campaign history tool, winning internal award.
- Created a spam detection system for campaign comments.
- Parallelized API acceptance test builds on CircleCI continuous integration system.



## User Experience Designer

*Jan–Aug 2014,  
San Francisco*

- Redesigned Firefox's network error pages to increase error recovery.
- Prototyped tab-switching concept in Firefox for Android.
- Created interaction designs for Firefox OS's data consumption tool.
- Wrote and conducted usability studies for Firefox OS features.



## Co-Founder

*Oct 2013–Sep 2015,  
Waterloo, ON*

- Kickstarted Canada's largest hackathon for 1000+ hackers from 100 schools in 10 countries.
- Defined hackathon's vision and values.
- Led website engineering and design team to create application page for 1000s of applicants.



## Gesture Controls Software Developer

*May–Aug 2013,  
Waterloo*

- Architected iOS API for the Myo, a gesture-based control system.
- Developed a quadcopter control system for integration with Myo.

*May this whitespace bring you a  
momentary glimpse inner peace.*