

# Matt Kramers

Software Developer | [mattkramers@gmail.com](mailto:mattkramers@gmail.com) | Ontario, Canada

[GitHub](#) | [LinkedIn](#) | [Website](#)

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## Stack

During my time at **Altis Labs**, I've had the opportunity to work at depth with a wide variety of technologies. I've listed some of the more notable ones below.

- Frontend: **React + Typescript (Hooks, Context, Redux, Apollo)**
- Backend: **Node (Express), Python (FastAPI), GraphQL (Hasura)**
- Database: **PostgreSQL, DynamoDB, SQLite**
- DevOps: **Docker, GitHub Actions, AWS (EC2, S3, RDS, Lambda, API Gateway, ECS, IAM, CloudWatch), Terraform**
- Testing: **Jest, pytest, Cypress, Postman**
- Integrations: **Auth0, Sentry, LaunchDarkly, SendGrid, MixPanel, Google Analytics**
- Other: **Celery, RabbitMQ, Serverless, JetBrains, Git, Linux, Bash, Material UI, Figma, Linear, Notion, Slack, Google Workspace**

## Experience

### Altis Labs, Inc.

#### Lead Software Developer, Toronto

2019 - Present

- **Founding Technical Role:** As the initial technical hire, I led various aspects of web development.
- **Medical Imaging Platform:** Designed, built, and maintained a comprehensive medical imaging platform:
  - **Frontend:** Developed a **React + Typescript** interface with **GraphQL (Apollo)**.
  - **APIs:** Created context-specific **Node (Express)** and **Python (FastAPI)** APIs.
  - **Task Pipeline:** Implemented a distributed **Celery** task system.
  - **Database:** Managed a **PostgreSQL** database with 100+ tables.
  - **Docker & Deployment:** Utilized **Docker** for local development and **AWS** deployment managed by **Terraform**.
  - **AWS Security:** Established a security-focused **AWS** infrastructure.
  - **CI/CD Automation:** Set up **GitHub** Actions for automated CI/CD.
- **Process Establishment:** Introduced internal development processes and authored the organization's quality management system.
- **Mentorship and Team Management:** Guided research-oriented ML team in SDLC and MLOps, while recruiting, mentoring, and managing team members. Fostered relationships with product owners, users, and advisors to enhance product quality.

## **Focal Healthcare Inc.**

### **Lead Software Developer, Toronto**

2014 - 2019

- As Focal's inaugural employee, led end-to-end software design and development for two cutting-edge medical devices.
- Created and maintained **C# WPF** desktop software with advanced medical image visualization, 3D image reconstruction, semi-automated segmentation/registration, and user interface design.
- Managed a team of 7 developers, excelled in project management, established internal processes, and ensured **FDA 510k/ISO 13485/IEC 62304** compliant software development with complete DevOps implementation.

## **Robarts Research Institute**

### **Summer Research Student, London**

2012

- Developed a **C# WinForms** desktop application for evaluating human performance using a prostate biopsy device.

## **Education**

### **The University of Western Ontario**

#### **M.E.Sc. Biomedical Engineering - Fenster/Eagleson**

2012 - 2014

- Thesis focused on **Evaluating Human Performance for Image-Guided Surgical Tasks**
- Developed a mobile augmented reality app for neurosurgical guidance on Android devices using Java and **OpenGL**.
- Created a human performance evaluation pipeline for image-guided medical devices using custom **C# WinForms** applications.

### **The University of Western Ontario**

#### **B.E.Sc. Electrical and Computer Engineering**

2007 - 2012

- Capstone Project: **Prostate Biopsy Procedure Performance Evaluator and Replay Application**