








# Rashik Shahjahan

 [rashikshahjahan@protonmail.com](mailto:rashikshahjahan@protonmail.com) |  [rashikshahjahan](#) |  [RashikShahjahan](#)


## Technical Skills

<b>Programming Languages</b>	Python, JavaScript, TypeScript, Go, Rust, Java, C, C#, C++
<b>Machine Learning &amp; AI</b>	PyTorch, TensorFlow, spaCy, Transformers, pgvector, RAG, Dask, Ray, numpy
<b>Server Technologies</b>	PostgreSQL, MySQL, Redis, MongoDB, InfluxDB, RabbitMQ, Express, FastAPI, Flask, Django
<b>Web Development</b>	React, Next.js, Tailwind CSS, DaisyUI, Material-UI, Zod, StoryBook, Clerk
<b>DevOps &amp; Cloud</b>	Kubernetes, Docker, AWS, GCP, Ansible, Grafana

## Experience

 <b>Independent Consultant</b>	Toronto, Ontario
SOFTWARE ENGINEER	February 2024 - Present
<ul style="list-style-type: none"><li>Designed distributed computer vision pipeline for a stealth startup using <b>Celery</b> and <b>Kubernetes</b> to orchestrate <b>30</b> plus GPUs</li><li>Led development, architecture, and deployment of a marketplace startup's prototype, scaling it from <b>0 to 40K USD</b> in transactions using <b>FastAPI</b>, <b>React</b>, <b>PostgreSQL</b>, and <b>GCP</b>.</li></ul>	
 <b>Inference</b>	Toronto, Ontario
SOFTWARE ENGINEER	January 2022 - February 2024
<ul style="list-style-type: none"><li>Led a team of <b>3</b> engineers to build a metrics monitoring system for <b>250+</b> machines using <b>RabbitMQ</b>, <b>InfluxDB</b>, and <b>FastAPI</b>, reducing downtime incidents by <b>50%</b>.</li><li>Optimized a high-traffic <b>Node.js</b> application by implementing <b>MongoDB</b> sharding, reducing response times by <b>20x</b>.</li><li>Built a health monitoring system with <b>Python</b>, cutting application downtime by <b>30x</b> through automated error detection and recovery.</li><li>Redesigned a ML pipeline using <b>Ray</b>, reducing query times from 30 minutes to real-time by offloading computation to an asynchronous preprocessing step.</li><li>Directed a migration from <b>Redis</b> to <b>PostgreSQL</b>, boosting query efficiency by <b>20x</b> and ensuring seamless handling of high-volume data.</li></ul>	
 <b>Thrivr Inc.</b>	Remote, Canada
SOFTWARE DEVELOPER	August 2021 - December 2021
<ul style="list-style-type: none"><li>Enabled a seamless booking experience by integrating <b>Google Maps</b> into a <b>React</b> application.</li></ul>	
 <b>CloudConstable Inc.</b>	Toronto, Ontario
SOFTWARE DEVELOPER	June 2021 - August 2021
<ul style="list-style-type: none"><li>Enhanced fever detection accuracy by <b>70%</b> by designing a computer vision algorithm using <b>C++</b> and <b>OpenCV</b>.</li></ul>	
 <b>Mannlab</b>	Toronto, Ontario
RESEARCH INTERN	May 2020 - September 2020
<ul style="list-style-type: none"><li>Designed and implemented an EEG-based auditory attention detection system using <b>CNNs</b>, <b>SVMs</b>, and <b>PCA</b>.</li></ul>	
 <b>Adlib Software</b>	Burlington, Ontario
DEVOPS CO-OP	September 2019 - December 2019
<ul style="list-style-type: none"><li>Automated Windows and SQL Server security benchmarks audits, enhancing operational efficiency.</li></ul>	
 <b>Mighty Egg Technologies</b>	Toronto, Ontario
SOFTWARE ENGINEERING INTERN	May 2018 - September 2018
<ul style="list-style-type: none"><li>Developed a serverless <b>Node.js</b> chatbot using <b>AWS Lambda</b>, enabling efficient automation of regular surveys.</li></ul>	

## Patents

 <b>Method and System for Determining Relationships Between Linguistic Entities - US-20230143418-A1</b>	Inference, Toronto, Ontario
CO-INVENTOR(PENDING)	2022-11-04
<ul style="list-style-type: none"><li>Built a system to convert text corpora into dependency trees, enabling faster relationship classification between entities.</li></ul>	

## Education

<b>McMaster University</b>	Hamilton, Ontario
BACHELOR OF ENGINEERING IN ENGINEERING PHYSICS CO-OP	2016 - 2021