

# KEESHIGAN PIRABAHARAN

## SOFTWARE DEVELOPER / MECHATRONICS ENGINEER

### CONTACT

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📍 Toronto, ON

### SKILLS

#### Full Stack

HTML / CSS / Tailwind  
JavaScript / TypeScript  
C# / .NET Core  
ReactJS / NextJS  
Bun / NodeJS / ExpressJS  
ORMs (Prisma / Drizzle)  
REST / GraphQL  
NoSQL (MongoDB)  
SQL (MySQL / PostgreSQL)

#### Mobile

Dart / Flutter  
Android / Kotlin

#### Embedded Systems

C / C++  
Linux  
Arduino / Raspberry Pi

#### Data Science / Other

Python  
Git  
AWS CDK / SDK  
Docker / Kubernetes

### EDUCATION

**B.E.Sc - Mechatronics  
Systems Engineering**  
University of Western Ontario  
Sep 2017 - Apr 2022  
London, ON

### PROFILE

I am a performance-driven software developer with a passion for creating innovative solutions. I excel in swiftly mastering new technologies and I am proficient at developing reliable, efficient, and scalable applications that significantly enhance system performance. My strong problem-solving aptitude, attention to detail, and excellent communication skills facilitate effective collaboration, contributing to the success of projects.

### EXPERIENCE

#### Software Developer | *Curtiss-Wright Defense Solutions*

Ottawa, ON | June 2022 - Present

- Developed automated C and Bash test software for qualification testing on a hybrid vehicle management / network switch device
- Created a Web GUI platform using React.js and Hiawatha to allow users to make switch configuration adjustments along with existing CLI platform
- Utilized Docker to streamline cross-compilation toolchain setup for ARM SBCs
- Seamlessly integrated data plane and control plane ports to optimize network performance and functionality for a new 100G switch platform

#### Software Technical Engineer (PEY) | *Ontario Power Generation*

Pickering, ON | May 2020 – August 2021

- Enhanced plant control software to optimize efficiency and safety of nuclear power plant operations by utilizing MATLAB for simulation and validation
- Engaged closely with regulatory bodies such as the Canadian Nuclear Safety Commission (CNSC) to ensure compliance with regulatory requirements
- Proactively monitored changes in regulatory standards and guidelines, implementing necessary updates to software systems to maintain compliance
- Collaborated with maintenance teams to develop software-based solutions for optimizing outage schedules and reducing downtime

### PROJECTS

#### AI SaaS 🤖

- Developed a Chat-GPT like AI SaaS that generates conversation, image, video, code and music responses using various AI models
- Utilized SST to integrate AWS services for production
- Utilized Docker, Postgres and S3 to save expensive AI generated prompts

#### E-Commerce Store 🌐 🌐 🤖 + Admin Dashboard 🌐 🤖

- Developed an interconnected store and CMS web application using Next.js 13.4 and Shadcn/ui, with the option to create and manage multiple stores
- Integrated Stripe for secure payments and set up webhooks for data sync
- Utilized AWS S3 and RDS to store data for high scalability in production

#### Smart Home Mobile App 📱 🤖

- Developed a smart Android application to facilitate remote control of blinds including a smart mode, leveraging geofence technology for automation
- Integrated Raspberry Pi with Firebase to facilitate user-controlled window and blind operations, incorporating real-time sensor data for prompt adjustments

### CERTIFICATION

#### AWS Certified Cloud Practitioner

Amazon Web Services (AWS)  
Issued Mar 2024 • Expires Mar 2027