

SILIN RAJ GUPTA

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EDUCATION

University of Waterloo

Honours Bachelor of Computer Science, Co-op

Waterloo, ON

Sep 2024 – May 2029

TECHNICAL SKILLS

Programming & Web Development: Python, JavaScript, TypeScript, HTML, CSS, C/C++, Racket, Ruby (learning), SQL
Frameworks & Technologies: React.js, Next.js, Django, Flask, FastAPI, Ruby on Rails (learning), RESTful APIs, GraphQL
Machine Learning & AI: TensorFlow, PyTorch, Scikit-learn, Pandas, NumPy, LangChain, OpenAI API, Google Gemini API
Databases & Infrastructure: MySQL, PostgreSQL, MongoDB, Redis, AWS (EC2), Docker, Git, GitLab, Vercel, CI/CD, Linux
Development Practices: Agile, TDD, Code Reviews, Unit Testing, Performance Optimization, Pair Programming

WORK EXPERIENCE

Software Developer Intern

May 2025 – Aug 2025

PolicyAdvisor

Toronto, ON, Canada

- Architected a **Next.js/Python** full-stack insurance automation platform, slashing manual document processing time by **98%** and freeing brokers to focus on client engagement.
- Developed an AI-powered document processing pipeline via **Google Gemini API**, achieving **99%+** accuracy across 10+ carriers and eliminating manual data entry.
- Built a dynamic document generation system with **React** and **Python**, real-time editing, and cloud storage, automating policy letter creation.
- Integrated **AI voicebot** for 24/7 appointment scheduling, cutting human intervention by **90%** during peak hours and enabling instant confirmations via chatbots, calendar sync, and SMS notifications.
- Transformed insurance comparison platform for the Canadian visitor market using **Next.js/React** and **multi-provider API** integrations with caching/error handling.

Software Developer Intern

Apr 2024 – Jun 2024

Modulus Systems

New Delhi, India

- Developed **Python** AI solutions using TensorFlow and Scikit-learn, **reducing** user churn by **20%** across platforms.
- Executed digital campaigns with Google Analytics, driving **1,000** monthly visitors and **boosting** brand visibility.
- Engineered ML algorithms to automate data workflows, **enhancing** efficiency for cross-functional team analyses.

Software Developer Intern

May 2023 – Aug 2023

Mentors Ethicare

New Delhi, India

- Constructed a **HIPAA-compliant** telemedicine platform utilizing **Python** and **Flask**, accelerating virtual care access by **40%** and shortening patient wait times by **10 minutes** per appointment.
- Integrated MySQL patient records with **optimized** schemas, significantly **reducing** data access time for daily operations.

PROJECTS

CompareIQ - Insurance Comparison Tool | *Next.js, Python, Google Gemini API, AI Automation*

PolicyAdvisor

- Streamlined insurance quote generation with a Next.js/Python platform, cutting comparison time by 3 hours, also resulting in a 5 star internal rating based on employee feedback.
- Leveraged **Google Gemini API** to build AI-powered document processing, reaching **99% accuracy** in data extraction across five major insurance providers, improving processing times by **60%** and reducing manual errors.
- Created an Excel generation system with dynamic calculations and professional formatting, eliminating manual spreadsheet creation and reducing errors.

AI Appointment Scheduling System | *AI Automation, API Integration, Workflow Design*

PolicyAdvisor

- Designed automated appointment booking system using **AI chatbots** and **calendar integration**, reducing manual scheduling by **90%** with instant confirmations.
- Orchestrated a streamlined appointment scheduling system by integrating **AI chatbots**, calendar applications, and SMS notifications, diminishing manual booking efforts by **90%** and allowing staff to focus on complex tasks.

Insurance Platform Development | *Next.js, React, TypeScript, API Integration* 🔄

PolicyAdvisor

- Transformed an insurance comparison platform utilizing **Next.js** and **React**, uniquely serving the Canadian visitor market, recognized by senior leadership as the most complex project undertaken by an intern.
- Integrated multiple insurance **provider APIs** with intelligent caching and error handling, creating unified comparison interface for **real-time** quotes.

🌐 Moosic Playlist Generator | *React.js, Spotify API, OpenAI API, Tailwind CSS, Vercel, Render* 🔄

Personal Project

- Launched a user-friendly web application leveraging **Spotify** and **OpenAI APIs**, enabling personalized playlist creation from text prompts, which led to the creation of **100+ playlists** weekly.
- Leveraged **Spotify API** for user authentication, playlist creation, and top songs display with automatic playlist addition to user accounts.
- Deployed scalable architecture with backend on **Render** and frontend on **Vercel**, achieving **100%** uptime.