

Kai Wang

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EDUCATION

University of Waterloo | Bachelor of Applied Science in Computer Engineering (Software Engineering Option)
Relevant Courses: Software Design & Architecture, Distributed Systems, Computer Networks, Databases, Algorithms
Sep 2021 - Apr 2026

SKILLS

Languages/Frameworks: C#/.NET Core, Ruby on Rails, Python, SQL, Java, C/C++, JavaScript, Vue, React, HTML/CSS
Tools/Technologies: PostgreSQL, MySQL, MongoDB, Node, AWS, GCP, Docker, Kubernetes, Selenium, PyQt, Stripe, Git

EXPERIENCE

Vidyard Software Developer Co-op	Sep 2025 - Dec 2025
<i>Ruby on Rails, Vue, Node.js, MySQL, Docker, Kubernetes, Terraform, RSpec, GraphQL, Stripe</i>	Kitchener, ON
<ul style="list-style-type: none">Developed full-stack dashboard features using Ruby on Rails and Vue.js, with a MySQL database and GraphQL integrationImplemented Stripe workflows to streamline payment processing across various subscription types and payment plansLaunched a monthly to yearly subscription migration feature, boosting customer retention by 78% and reducing churn by 3x	
Workleap Software Developer Intern	Jan 2025 - Apr 2025
<i>Ruby on Rails, PostgreSQL, Sentry, Mixpanel, OpenTelemetry, Honeycomb, Sidekiq, RSpec, Ember.js</i>	Montreal, QC
<ul style="list-style-type: none">Delivered backend features in Ruby on Rails, creating PostgreSQL migrations, exposing APIs, and testing via RSpecBuilt a multithreaded AI content generation algorithm, improving performance and scaling to support high-volume requestsImproved system observability by integrating OpenTelemetry tracing with Honeycomb to monitor application performanceEnhanced product analytics for backend services by integrating Mixpanel for event tracking and Sentry for error monitoring	
Senstar Corporation Software Developer Associate Intern	Jan 2024 - Apr 2024
<i>C#/.NET, SQL Server, DevExpress, Winforms, NUnit</i>	Waterloo, ON
<ul style="list-style-type: none">Built an advanced video security system in C#/.NET with DevExpress, Winforms, and SQL Server for database managementImplemented robust third-party integrations, utilizing modular design principles like decoupling and dependency injectionImproved code reliability via test-driven development, writing structured unit/integration tests with NUnit	
Titanium Agency Software Engineer Intern	May 2023 - Aug 2023
<i>.NET Core, GCP, BigQuery, CloudSQL, Python, JavaScript, Blazor</i>	Waterloo, ON
<ul style="list-style-type: none">Designed a real-time data pipeline in .NET Core to extract live advertisement expense data using Google BigQuery (GCP)Automated ad creation/management via the Google Ads API and asynchronous Python scripts, slashing campaign setup timeStreamlined ad performance analysis using a hybrid JavaScript/Blazor web app backed by CloudSQL	
Miovision Software Developer Intern	Sep 2022 - Dec 2022
<i>Ruby on Rails, MySQL, C#/.NET, AWS S3, Docker, Kubernetes</i>	Kitchener, ON
<ul style="list-style-type: none">Built backend features in C#/.NET Core, including internal API endpoints and comprehensive unit/integration testsContributed to a robust Ruby on Rails platform for road traffic data analysis, leveraging AWS S3 for large-scale cloud storageProcessed high-volume traffic data with optimized SQL queries to support data analysis and improve performance	
Watolink Engineering Student Design Team Connected Software Developer	Sep 2021 – Dec 2022
<i>Python, PyQt, DALL-E, Selenium, Tweepy</i>	Waterloo, ON
<ul style="list-style-type: none">Engineered a brain-computer interface using action classification through EEG signal analysis in Python with a PyQt GUIIntegrated with the DALL-E AI model via Selenium automation and enabled BCI-driven X interaction using the Tweepy libraryPlaced 1st overall in the NeuroTechX global undergraduate non-invasive neural interface student club competition	

PROJECTS

SpyWatch Python, FFmpeg, UDP, Web Sockets	
<ul style="list-style-type: none">Created a drone-based, video-only surveillance device that combines real-time video footage and AI-powered lip readingProgrammed in Python using the Tello Drone SDK via UDP web sockets, and FFmpeg for video decoding and streamingWinner of the Symphonic Labs API award at Hack the North 2024 for creatively applying AI in audioless environments	
Sonus Halo Python, Tensorflow Lite, Keras, C++	
<ul style="list-style-type: none">Designed a wearable wristband that translates audio into haptic feedback, improving accessibility for hearing-impaired usersTrained and deployed a TensorFlow Lite CNN to classify real-time environmental audio input into distinct sound categoriesImplemented a Python audio preprocessing pipeline to filter, segment, and label clips for ML model training and inference	