

Juho Choi

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EDUCATION

University of Waterloo - Bachelor of Computer Science	09/2021 – 08/2026
Wilfrid Laurier University – Bachelor of Business Administration	09/2021 – 08/2026

EXPERIENCE

Software Engineer <i>QuadReal</i> <ul style="list-style-type: none">Built a full-stack AI Market NLP summarization agent (Go, Python, React, OpenAI API, Tesseract OCR, LlamaIndex) to help teams quickly extract insights from earnings reports, market analyses, and research documentsBuilt 5 interactive pages and 7 modular React components using Next.js, Tailwind CSS, MapLibre, and Deck.gl to visualize complex spatial-temporal analytics, improving frontend scalability and performanceDeveloped backend services with Go, PostgreSQL/PostGIS, and Supabase to ingest, transform, and serve geospatial data from OpenStreetMap (OSM), enabling spatial queries via REST APIEngineered an automated geospatial data pipeline by integrating Overpass API, GeoJSON processing, and PostGIS + dbt workflowsOptimized spatial queries using PostGIS indexing and boundary filtering, reducing response times by 30% on average	Jan 2025 – Present <i>Toronto, ON</i>
Data Engineer <i>Eclipse Automation, Part of Accenture</i> <ul style="list-style-type: none">Designed and implemented an automated ELT pipeline, integrating PostgreSQL with Power BI, reducing manual reporting time by 80% through scheduled data refreshesOptimized SQL queries, improving query execution efficiency and enhancing Power BI report refresh performanceDeveloped and refined data models, ensuring data integrity for 10K+ records and improving reporting accuracyAutomated scheduled data extraction from PostgreSQL, enabling weekly synchronization of 50K+ rows into Power BI dashboardsEnabled automated performance tracking for 20+ users by integrating sales metrics into Power BI dashboards	Jan 2024 - Apr 2024 <i>Cambridge, ON</i>
Fire Direction Officer (Military Service) <i>Republic of Korea Army 21st Infantry Division Artillery</i> <ul style="list-style-type: none">Processed climate and geographic data for real-time trajectory calculations as part of a coordinated officer team	Oct 2019 - May 2021 <i>South Korea</i>

PROJECTS

AI Market Research NLP Summarization Agent <i>Full-stack AI tool for parsing and querying financial research at QuadReal</i> <ul style="list-style-type: none">Developed a full-stack AI-driven summarization agent using Go (concurrent file handling), Python (Tesseract OCR), React, OpenAI API and LlamaIndex to ingest PDF, CSV, PNG, and TXT files and extract key insights and summariesIntegrated OCR for image-based documents and enabled semantic search and natural language Q&A using LlamaIndexDesigned to support internal research and strategy teams with faster analysis of earnings reports and market trend documents
Quick Tweet - Full-Stack Social Media Web App <ul style="list-style-type: none">Developed a Twitter-like social media platform with 5 interactive pages using React, TypeScript, Firebase, and React Router for user authentication, data storage, and real-time tweet interactionsIntegrated Firebase Authentication supporting 2 sign-up methods (email/password and GitHub OAuth)Implemented full CRUD functionality with Firebase Firestore for tweet creation, deletion, and retrieval, with real-time updates using onSnapshot listenersDeployed front-end to AWS S3 and CloudFront and hosted backend on Firebase, improving performance and user experience

SKILLS

Languages: JavaScript, TypeScript, Go, Python, C++, C, PostgreSQL, Spatial SQL (PostGIS), HTML/CSS
Frameworks/Libraries: React, Next.js, Node.js, Tailwind CSS, dbt
Cloud Services: AWS S3, AWS CloudFront, Firebase
Development Tools: Git, Azure DevOps, Jupyter Notebook, n8n, Playwright, Power BI