

RASTKO SALVARICA

FULL-STACK SOFTWARE ENGINEER

✉ raciosh@gmail.com | 🏠 rastkosalvarica.com | 🌐 [RastkoAmun](https://RastkoAmun.com) | ☎ +1 (236) 335-8449 | Surrey, BC, Canada

WORK EXPERIENCE

Full-stack Software Engineer | PressCentric

May 2023 – Jun 2025

Backoffice Web Application | Next.js, React, TypeScript, GraphQL, ApolloClient

- Developed a **modern, scalable back-office platform** from the ground up, delivering high-performance and maintainable features for managing client data, orders, and payments across departments, **supporting thousands of active users**.
- **Mentored** newly onboarded junior developers by reviewing their code, guiding them through development workflows, and helping them understand the project architecture.
- Collaborated with the backend team to help design and implement a **secure and scalable AWS infrastructure**, contributing to deployment workflows and environment configuration.
- Architected the main **Control Panel interface**, unifying client management, payment logs, and tax configurations into a cohesive experience, while implementing a reusable **dynamic filtering system** that enhanced searchability and user control across multiple features.
- Implemented a flexible **text editor** with HTML-like syntax support, empowering non-technical users to create custom microsite pages, boosting adoption and content creation.
- Built and maintained over **30+ dynamic pages and reusable components**, ensuring flexibility and consistency across the platform.

PERSONAL PROJECTS

TTRPG Characters Management System (Full-Stack Web App)

Dec 2024 – Aug 2025

(NextJS, React, TypeScript, GraphQL, MUI, ApolloServer, Prisma, NeonDB, JWT)

- Developed a **full-stack** character management **web app** for **tabletop RPG players**, offering a more intuitive and flexible alternative to existing platforms with **real-time editing, stat tracking, and user account management**.
- Implemented a custom **JWT-based authentication system** to securely manage user accounts and private character data. The app is **actively used by real users**.
- Built GraphQL schema and resolvers in Apollo Server with **per-request JWT context** to **securely scope queries/mutations to the signed-in user**, backed by Prisma and Neon Postgres for scalable, type-safe access to complex character data.

X-Ray Age Prediction (ML Project Lead) | (Python, PyTorch, scikit-learn, Seaborn)

March 2025 – April 2025

- **Led a team of 5** to develop a CNN-based bone age prediction model on **12,000+ pediatric X-rays**, achieving a **13-month MAE** and extending the system to gender classification with **83% accuracy**.
- Built a **custom PyTorch pipeline** for preprocessing (resizing, normalization, metadata integration) and trained a **6-layer convolutional network** with batch norm, dropout, and optimized **MAE+MSE loss**.
- Conducted **error analysis** with statistical evaluations and scatter plot visualizations to identify edge cases, improving model robustness across age groups.

Commodities Price Prediction (Data Science / Web App Project)

Nov 2024 – Dec 2024

(Flask, Python, Pandas, NextJS, MUI, Axios, ApexCharts, RestAPI, statsmodels)

- Developed a full-stack app with a Python backend to analyze and forecast commodity prices using **ETL on 30 years of historical data**.
- Implemented **dynamic routing for 8 resources** including aluminum, gas, coffee, and wheat, with 5-year price predictions and interactive data visualizations made with ApexCharts.

EDUCATION AND CERTICATIONS

- **Bachelor of Science in Computer Science** | Simon Fraser University, Burnaby
- **AWS Cloud Practitioner Certification** (in process of getting AWS Solutions Architect)

Jan 2022 – Aug 2025

Jun 2024

SKILLS

Programming Languages: JavaScript/TypeScript, Python, C/C++, Java, Rust, Haskell

Frameworks: React, NextJS, GraphQL, Apollo, MUI, Prisma, Express, Redux, Jest, RTL, PyTorch

Architecture & Storage: AWS, Git, Docker, PostgreSQL, MongoDB, Vercel, Neon

Soft Skills: communication, teamwork, adaptability, problem-solving, critical thinking, initiative, ownership