Mackenzie Sampson

mackenzie.sampson@outlook.com | linkedin.com/in/macsampson | github.com/macsampson | (778) 828-9009

TECHNICAL SKILLS

Languages:	TypeScript/JavaScript, Python, Elixir, C#, SQL
Backend:	Node.js, Express.js, FastAPI
Frontend:	React, Next.js, HTML, CSS
Databases:	PostgreSQL, MongoDB
DevOps/Cloud:	Docker, Git, Jenkins, AWS (EC2, S3), Kubernetes
AI/ML Tools:	Llama 3, Stable Diffusion, Tortoise TTS

PROFESSIONAL EXPERIENCE

PocketCaps - *Founder & Full-Stack Product Engineer*   **Sept 2020 – Mar 2025**
TypeScript, React, Postgres, NextJS
- Designed and developed a scalable e-commerce platform with **Next.js**, **React**, and **PostgreSQL**.
- Achieved a 250% sales increase and acquired 1,500+ customers within the first year.
- Implemented a custom headless CMS with dynamic inventory and real-time order processing.
- Automated API-driven workflows, reducing manual operations by 80% and minimizing discrepancies.

Electronic Arts - *Tools Software Engineer - Contract*   **Sept 2019 – Nov 2020**
Python, C#, JIRA
- Developed an automated hair physics integration tool using **Python**, reducing artist costs by 12%.
- Maintained, updated, and deployed a high-performance asset processing pipeline in **C#**.
- Reduced processing time by 15% by automating ingestion, transformation, and export of game assets.
- Collaborated with QA, Build Engineering, and Art teams within an **Agile** framework.

SAP - *Software Engineer Intern (Legal Compliance)*   **May - Dec 2017**
Python, Selenium
- Engineered and presented an automated compliance data entry tool using **Python**, **Pandas**, **Excel**, and **Selenium**.
- Reduced data entry time by 80% and eliminated 95% of manual errors.
- Improved audit accuracy by 25% and enabled faster compliance reporting through tool integration.
- Tool adoption led to standardized practices and improved efficiency across multiple teams.

MDA - *Junior Web Developer*   **Jan - Sept 2016**
JavaScript, C#, HTML/CSS
- Developed a dynamic infographic using **C#** and **JavaScript**, increasing user engagement by 80%.
- Facilitated stakeholder engagement and purchasing of satellite imaging solutions.
- Collaborated with internal clients, resulting in the corporate website release 2 months ahead of schedule.
- Enhanced online presence and reduced project costs by 15%.

PROJECTS

AI Shorts Video Generator   **July 2024 - Present**
Python, FastAPI, React, Docker, Llama 3, Stable Diffusion, Tortoise TTS, FFmpeg
- Architected a scalable video generation pipeline using **FastAPI** and **Docker**.
- Integrated microservices for **Llama 3** script generation, **Stable Diffusion** image creation, and **Tortoise TTS** voiceovers.

E-commerce Headless CMS   **Aug 2021 - June 2024**
React, PostgreSQL, TypeScript, Express, Node
- Engineered a **React**-based headless CMS with **PostgreSQL** and **Express** for RESTful APIs.
- Implemented real-time inventory tracking, automated bundle pricing, and **Stripe** integration.

EDUCATION

Bachelor of Computer Science
University of British Columbia

Bachelor of Business Administration (Finance Major)
Thompson Rivers University