Krishnakumar Valliappan
System Software Engineer
Rust compiler tooling and ecosystem

Toronto, ON
Website | LinkedIn

+1 (514) 980 6433
Krishnavalliappan02@gmail.com

Tech enthusiast and avid learner, I recently discovered my passion for web development while creating my portfolio. What started as a showcase project ignited a spark, captivating me with the creative process of bringing ideas to life through code. I've quickly developed proficiency in various web technologies including **[top skills].** Now, I'm eager to transition into a web development career, leveraging my analytical background to craft engaging, user-friendly experiences. When not immersed in coding, you'll find me conquering hiking trails, solving puzzles, or perfecting my homemade pizza recipe – which I'm already planning to feature on my next web project!

Technologies and Languages

- **Languages:** JavaScript, TypeScript, Python, SQL
- **Web Development:** React, NextJs, Vue.js, Express.js, Django, HTML, CSS, TailwindCSS
- **Databases:** MySQL, MongoDB
- **Tools:** GIT, Docker, Jira, Azure, AWS, Snowflake, MS Office suite, LaTeX
- **Framework and libraries:** Spacy, Tensorflow, OpenCV, Selenium, beautifulsoup4, PySpark

Projects

- **Developed an Interactive Digital Portfolio:**
  - Developed a full-stack personal portfolio using Next.js and TypeScript, showcasing proficiency in front-end technology.
  - Implemented a dynamic project showcase with interactive elements and live demos to enhance user engagement.
  - Ensured cross-browser compatibility, accessibility compliance, and robust security measures through systematic testing and regular updates.
  - Utilized Git and GitHub for efficient version control and collaborative development workflows.

  Technologies & Skills learned: *Next.js, TypeScript, Tailwind-CSS, Framer-motion, shadcn-ui.*

- **Developed the Notion TickTick Two-Way Sync Integration**:
  - Developed a Python-based synchronization app between Notion and TickTick using API integrations.
  - Unified task management across platforms, enhancing personal productivity and efficiency.
  - Implemented automation strategies to streamline workflow and reduce manual task handling.
  - Created a user-friendly solution that addresses cross-platform inefficiencies in task management.

  Technologies & Skills learned: Python, API integration, and automation strategies.

Work Experience

Associate Data Analyst	IA Flow Elements	April 2020 – July 2022

- Engineered a **predictive model** that utilized machine learning algorithms to forecast sales trends, enhancing decision-making accuracy and contributing to a 15% uplift in sales projections accuracy.

- Boosted data processing efficiency by 40% via custom Python scripts for **ETL automation**, ensuring precise data handling from extraction to in-depth analysis, integrating with AWS cloud.
- Led the team to optimize data processing workflows by 30% by migrating to **AWS**, enhancing both data handling efficiency and **system scalability** while also ensuring data accuracy.
- Developed a **Python-based** application with a Tkinter GUI for the marketing team to add and track quotes, integrating with **Power BI** to visually monitor progress and improve quote management effieciny.
- Established efficiency metrics and automated Excel dashboards using **VBA scripting**, which boosted the productivity and efficiency of designers and CAD technicians by over 25%.
- Enhanced business process efficiency and decision support by collaborating with teams to optimize data workflows and designing tailored Power BI dashboards and **KPI reports**, resulting in improved strategic planning across the organization.

CAD Designer   **IA Flow Elements**   **June 2019 – March 2020**

- Designed flow elements according to provided specifications using RW Miller software, improving product performance in the oil & gas sector.
- Managed technical quotations, effectively converting quotes to orders, demonstrating strong business communication skills.
- Handled client-centric reporting and documentation, ensuring tailored solutions and high customer satisfaction.

Education

- **Master of Engineering,** Concordia University.   **2022 - 2024**
- **Bachelor of Engineering,** Anna University.   **2015 – 2019**

Awards

- **Awarded Membership in Golden Key International Honor Society:** Recognized for academic excellence by being invited to join this prestigious society, which represents the top 15% of college and university students globally based on scholarly achievements.
- **Received the Rising Star Award in 2020:** Honored for exceptional performance and potential in data analytics within the first year of employment.

Extracurricular

- **Teaching Assistant, Transform Calculus and PDE, Concordia University (Sep 2023 – Dec 2023):** Developed Python simulations to demonstrate concepts like Fourier Series, Laplace Transforms, and PDEs, significantly enhancing student understanding. Led collaborative learning sessions and received excellent feedback, achieving a 20% increase in student satisfaction ratings.
- **Event Organizer, EXPRO Organization:** Successfully coordinated a major technical event during my undergraduate studies, fostering team collaboration and leadership skills in a practical setting.
- **Volunteer, Reading Assistance for Visually Impaired:** Provided support to individuals with visual reading disabilities, enhancing accessibility and contributing to community welfare during my undergraduate studies.