LAKSHMI PREETHI KAMAK

lkamak@lakeheadu.ca +1 8077095628

PROFILE Data-driven Project Leader and Scrum Master with over 10 years of experience across public and private sectors, including extensive work with the Canada Revenue Agency's Digital Capacity Enablement and Digital Acceleration Division. Originally joining CRA as a developer, I quickly advanced into project management roles, leveraging my expertise in software development, Agile methodologies, and stakeholder engagement. Skilled in driving digital transformation initiatives, managing cross-functional teams, and delivering cloud-integrated solutions using modern tech stacks, with strong expertise in API development and AI/ML implementation. A passionate problem solver with a proven ability to align technology with business objectives, delivering innovative and sustainable results.

EXPERIENCE

IT Developer | Analyst - *Canada Revenue Agency,* OCT 2023 to PRESENT

▪ Served as Project Leader, managing digital transformation projects under Information and Technology Branch (ITB) and facilitating costing calls for on-boarders, impact assessments and option analysis.
▪ Scrum Master for cross-functional teams, facilitating standups, sprint retrospectives, and backlog refinement to drive cross-functional team alignment and reduce scope creep.
▪ Built a full-stack multilingual Angular web application with accessibility for digital *tax* forms, translating wireframes into functional UI components.
▪ Built AI-powered APIs by Leveraging Azure OpenAI Service for dynamic LLM machine learning model integration with semantic kernels and Retrieval-Augmented Generation (RAG) to deliver accurate data for enterprise GenAI solutions within existing infrastructure.
▪ Designed a high performance API for volumetrics handling 50k-100k hits with optimized performance for Intra departmental partner data exchange with external dental care, disability benefit systems.
▪ Implemented RESTful APIs for Internal CRA applications in Java, MongoDB for data management, SOAPUI for testing, and cloud-integrated reporting solutions using Azure Blob Storage.
▪ Threat modeling, security assessments, and vulnerability analysis of APIs ensuring ITB security policies.
▪ Achieved 80% testing code coverage with Karma and Jasmine and cleared code smells in SonarQube.
▪ Maintained Dashboards to support data-driven decision-making for director-level presentations.
▪ *Spearheaded release plan for cloud project, serving as the pathfinder for auto-deployment during early maintenance hours, reducing rollout time by 30%. Received appreciation from management.*

Research Assistant - *DaTALab, Lakehead University,* 2021 - 2023

▪Developed AI solutions including NLP classification pipelines, AI mirror with OpenCV and diffusion models, recommendation systems using AWS Personalize, and cloud-based AI/ML experiments on AWS EMR.
▪ Assisted in undergraduate teaching for Big Data, Artificial Intelligence, Cloud Computing and RDBMS.
▪ Implemented CUDA-based ELM model with 94.4% accuracy securing 1st place in university Hackathon.

Associate - *Cognizant Technology Solutions,* 2018 to 2021

▪ Led a team of five to manage industrial *telecommunication* and scrum stand-ups to transform business requirements into operational code through agile methods.
▪ Defined project scope and conducted risk assessments, identifying obstacles and mitigation strategies.
▪ Implemented data pipelines between multiple legacy and API datasource to new platforms using ETL tools.
▪ Performed data profiling and analysis of legacy systems and implemented wrangling with NumPy and Pandas to integrate with data warehouses.
▪ Constructed cohort business analysis reports using robust statistical techniques to identify and manage the trade-off between corrupted data and operational risks.
▪ Identified, troubleshooted, and resolved code defects to ensure system reliability, data integrity.
▪ Enabled movement to new tech stack with large-scale adoption of Python where traditional ETL tools had limitations. Optimized code to remove legacy roadblocks and identified bottlenecks in performance.
▪ *Automated job runs, reducing customer delivery wait time by 3 hours, saving 600 hours in total.*

Senior Software Engineer- *Solartis Technology Services,* 2013 to 2018

▪ Led end-to-end web application development & Business Intelligence for insurance policy administration.
▪ WhiteHat Certified Secure Developer with expertise in API development, designed and deployed RESTful microservices to production by consuming Pentaho Reporting libraries, reducing reporting costs by 60%.
▪ Integrated the RESTful web services and xHTML frontend UI using Java APIs and hibernate framework.
▪ Led Database modeling for *insurance* data warehouse including HLBR consumption, and ER diagrams.
▪ Mined and transformed large XML/JSON and semi-structured CSV datasets from multiple sources into dashboards, enabling customers to identify trends, risks, and churn rates.
▪ Performed geostatistical analysis that identified an opportunity to decrease auditing costs by 21%, by assessing coastal hazards and flood risks to insured assets and boosted yearly revenue.
▪ *Enabled off-the-shelf reporting using monthly client usage, most consumed report, etc. metrics and* automated report bursting in PDF, Excel, XML formats.

SKILLS

▪ Frontend Development
▪ API Development
▪ Data Analytics & Machine Learning
▪ Cloud computing
▪ AI Solutions
▪ Database Modelling
▪ ETL & Business Intelligence
▪ Agile methodologies
▪ Project management
▪ Cost management
▪ Stakeholder communication
▪ Testing and Quality Assurance
▪ DevOps practices

TECHNICAL SKILLS

Framework: *Angular, HTML5, CSS3,* RESTful *Java* APIs*, JavaScript (Karma, Jasmine)*
Cloud Computing: *AWS, Azure and Microsoft Fabric.*
Data analytics: *Python* libraries (NumPy, Pandas, Scikit-learn, Keras, Flask), PSPP, Excel
Machine Learning: *Clustering, Regression, Predictive modeling, Diffusion and NLP models*
ETL & Reporting: Tableau, Pentaho
Databases: *Oracle, MySQL, SQL, Postgres, MongoDB*
CI/CD & Version Control: Jenkins, Git
Project Management: JIRA
IDE: *Visual Studio Code, Eclipse, Jupyter, Spyder*
API tools: SoapUI, Postman

EDUCATION

Masters in Computer Science, Lakehead University, Thunder Bay, 2023
Natural Sciences and Engineering Research Council of Canada Scholarship
Bachelor of Engineering, Computer Science, Anna University, Chennai*, 2013*

CERTIFICATION/ HONOURS

▪ **Summer School "AI for Industry",** *Deggendorf Institute of Technology, German Academic Exchange Scholarship*
▪ **Microsoft Azure Data Scientist**
▪ **Microsoft Fabric Associate**
▪ **WhiteHat certified Secure Developer**

LANGUAGES

English (Fluent),
French (NCLC Level 2)