

RESCHE BALAGANESH

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<http://portfolio.rescheportfolio.com/>

EDUCATION

Western University
Bachelor's, Software Engineering

September 2020 - April 2025

CERTIFICATIONS

- AWS Developer Associate, AWS Solution Architect Associate | 2024

PROFESSIONAL EXPERIENCE

Bank of Montreal

Junior Cloud Analyst

Toronto, ON, Canada

May 2023 - August 2024

- Designed, implemented, and upgraded Infrastructure as Code (IaC) custom modules with security and operational compliance using TypeScript, Terraform, and AWS CDK, achieving USD \$275,000 in annual savings
- Enhanced and maintained GitHub Actions AWS/Azure CI/CD workflows using AWS CDK and CDKTF, currently used by 20,000+ developers
- Led the AF SaaS Migration project, transitioning workflows from OnPrem Artifactory to Artifactory SaaS, and architected workflow designs with cross-functional teams to implement automated security and billing compliance checks, reducing developer disruption and improving operational efficiency by 50%.
- Released new IaC module version 7.x.x by, resolving compatibility issues, fixing broken code, and validating 80+ infrastructure modules through rigorous unit testing before successful deployment
- Developed a Python script to analyze GitHub API data and integrated it into a GitHub Actions pipeline built using Bash. Automated the identification of top contributors to IaC modules and improved workflow transparency and team collaboration.
- Updated existing infrastructure through CDK by adding IAM policies, decoupling architecture and changing the configuration of the CDK to meet changing requirements

PROJECTS & OUTSIDE EXPERIENCE

Capstone Project for RBC: Full-Stack Regional Opportunity Evaluation Using React, AWS, and Generative AI | 2024

- Architected and delivered a scalable full-stack serverless solution using React and AWS CDK, incorporating API Gateway, Lambda, DynamoDB, and S3.
- Developed a React-based application with an interactive interface to visualize regional opportunity scores for over 1,000 regions on a heatmap, reducing evaluation time from 5 hours to 10 minutes (96% efficiency improvement).
- Built a data pipeline to parse and store regional data in DynamoDB with 100% accuracy, automating the generation of over 1,000 scores for real-time analysis.
- Leveraged OpenAI's API to implement custom evaluation criteria, accelerating decision-making and reducing manual effort by 90%.

Automated Deployment and Infrastructure Management on Amazon EKS Using GitHub Actions | 2025

- Deployed a scalable application on Amazon EKS with Kubernetes, leveraging AWS CDK for infrastructure provisioning.
- Automated CI/CD pipeline using GitHub Actions to build Docker images, push to ECR, and update Kubernetes deployments efficiently.
- Implemented private subnets, NAT Gateway, and IAM roles to ensure secure and reliable operations.

Personal Website (JS, HTML, CSS, AWS CDK) | 2024

- Designed and deployed a static website architecture using AWS CDK, integrating CloudFront, S3, Route 53, and ACM to establish a professional-grade online presence.

SKILLS

Programming & Scripting Languages: Python, JavaScript, Java, SQL, TypeScript, Bash, NoSQL

Web Development & Frameworks: React.js, Node.js, Express.js, HTML/CSS, REST APIs

Cloud & DevOps Tools: Terraform, CI/CD Pipelines, AWS, Azure, Containerization, Docker, Kubernetes

Tools & Platforms: GitHub Actions, Linux/Unix, JIRA, Confluence, MySQL, Agile