SOVAN PATNAYAK

COMPUTER ENGINEERING AT THE UNIVERSITY OF WATERLOO

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TECHNICAL SKILLS

Languages: C++, C, Python, JavaScript, CSS, HTML5, PowerShell, Bash, Shell, SQL, VHDL, RISC-V
Frameworks: Express.js, Node.js, React.js, TensorFlow, GraphQL, Django, jQuery, JUnit, DynamoDB, MongoDB
Infrastructure: AWS Lambda, API Gateway, Jenkins, Ansible, ServiceNow, Alfabet, Coupa, Perforce (P4) , Git

WORK EXPERIENCE

Electronic Arts (EA)
Remote
Sep 2021 — Present

SOFTWARE QUALITY ENGINEERING | FIFA ULTIMATE TEAM (Internship + Part Time)
- Deployed an automated "shelf building" process through a Jenkins interface to simplify pre-integration testing and reduce Perforce (P4) errors (merge conflicts, out-of-sync builds, etc.) that impact testing and milestone delivery timelines.
- Devised a Jenkins pipeline by setting up authentication, authorization, Slack integration, and job/node configuration.
- Configured a designated "build" machine for the automated process by setting up an Ubuntu VM using Hyper-V and installing all required dependencies such as Perforce (P4), Java, Git, and Jenkins.

Sun Life Financial
Remote
Jan — Sep 2021

SOFTWARE ARCHITECT | ENTERPRISE ARCHITECTURE (Internship + Part Time)
- Prototyped a CRUD Serverless API with AWS Lambda, API Gateway and DynamoDB following tutorials, with <0.1% downtime.
- Oversaw the implementation of custom ServiceNow instance for multiple regions (Canada, US, Asia), impacting > 600+ users.
- Performed UAT/Regression testing for enhancements and created Business Requirements and Technical Design documents.
- Maintained and updated > 1000+ data records in Alfabet (Enterprise Architecture Management system) for audit purposes.

BMO Financial Group
Toronto, ON
Jan — Apr 2020

SOFTWARE TECHNOLOGY ANALYST | SOLUTIONS DESIGN & STRATEGY (Internship)
- Managed front-end web applications and deployed time-sensitive content in Coupa using hybrid Scrum/Agile methodology.
- Revamped entire front-end UI for internal Procurement website, improving functionality and increasing site traffic by 10%.
- Pioneered custom fields and intake forms, resolving critical issues pertaining to supplier invoices, requisitions, and payments.

BMO Financial Group
Toronto, ON
Jan — Apr 2019

IT OPERATIONS ANALYST | IT OPERATIONS AUTOMATION TEAM (Internship)
- Developed 300+ post-validation health check scripts for Windows applications in Python and integrated with Ansible Tower.
- Wrote scripts in PowerShell automating the migration of data from CSV to Ansible package, reducing creation time by 80%.
- Built scripts to scan pre-production servers, validate critical configurations and highlight errors, saving > 2+ developer hours.

CODING PROJECTS

PokéGAN
Python, TensorFlow
- Experimented with a Wasserstein Generative Adversarial Network (WGAN) trained on sprites to generate new Pokémon

Ray Tracer
C++
- Wrote a Ray-Tracer as outlined in "Ray Tracing in One Weekend", adding defocus blur, anti-aliasing and positionable camera.

Other
C++, Pygame, VHDL
- NES Super Mario Bros, Pac Man, Geese Spotter (Minesweeper), Energy Monitor, and more on GitHub

EDUCATION

University of Waterloo
Waterloo, ON
Sep 2018 - Present

CANDIDATE FOR B.ASC. IN COMPUTER ENGINEERING | HONOURS |CO-OP
- **Relevant Coursework:** Fundamentals of Programming (C++), Algorithms & Data Structures, Electronic & Linear Circuits, Digital Circuits & Systems, Digital Computers, Discrete Mathematics & Logic, Numerical Methods, MERN Stack (Online)
- **Honours & Awards:** President's Scholarship, Richard F. Haskayne Scholarship, Alexander Rutherford Scholarship