SAUMYA PANDYA

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SUMMARY

Results-driven Software Engineer with deep expertise in **data structures, algorithms, systems programming**, and **cloud-native architectures**. Proven success at IBM in delivering secure, high-performance solutions with a focus on cryptography, container orchestration, and scalable microservices. Strong communicator and collaborator with a passion for impactful, inclusive technology.

SKILLS

- Strong foundation in data structures, object-oriented programming, and **full-stack** development.
- Effective **communicator** and team player with proven **leadership** and **problem-solving** abilities.
- Highly **organized**, innovative, and self-motivated in diverse and **fast-paced** environments.

CORE TECHNICAL SKILLS

- **Languages**: Java, C, C++, Python, PHP, CSS, MySQL, JavaScript, Linux, Perl, Bash
- **Frameworks/Tools:** Spring Boot, JAX-RS, React.js, Node.js, Express.js, Sequelize, JUnit, Maven
- **Cloud & DevOps:** AWS, Google Cloud, Docker, Kubernetes, Jenkins, CI/CD pipelines
- **Concepts:** Algorithms, Computer Networking(TCP/UDP), Operating Systems, DBMS, Encryption (AES/DES, RSA)
- **Development Tools & Environments:** Linux (Ubuntu, RedHat), Windows, MacOS, Rancher Desktop, GitHub, Eclipse, VSCode

RELEVANT WORK EXPERIENCE

SOFTWARE DEVELOPER INTERN | IBM, MARKHAM, ON   📅 **MAY 2023 – AUGUST 2024**

Key Technologies: *Java, MicroProfile, JAX-RS, AES/DES, RSA, LTPA, LDAP, Bouncy Castle, AWS EKS, Docker, Open Liberty, GitHub, CI/CD, Linux, Spring Boot*

- **FIPS Integration into WebSphere** (*Feb 2024 – Apr 2024*)
    - Strengthened **security compliance** through **AES/DES encryption, LTPA tokens, RSA key limitations**, and **SSL/TLS optimization**.
    - **Debugged & troubleshot critical issues**, enhancing cryptographic efficiency and reliability.
- **Container Optimization on AWS-EKS** (*July 2023 – Oct 2023*)
    - [GitHub link to the guide draft](#)
    - Developed a **container optimization guide**, improving **Java app startup speed by 10x**.
    - **Managed AWS Kubernetes (EKS) clusters**, increasing efficiency by 55%.
    - Collaborated with **AWS professionals** to deliver optimized solutions **ahead of schedule**.
- **Developer Content & QA:**
    - Assisted in new feature development, QA, and **technical documentation** for backend enterprise systems.
    - Conducted testing, debugging, and **log analysis** across sandbox environments to reduce defects by 30%.
    - Supported knowledge sharing by documenting workflows and improving supporting docs.
- **Additional Contributions:**
    - Integrated **new technologies & features**, accelerating delivery timelines by 45%.
    - **Collaborated with cross-functional teams** to optimize **CI/CD pipelines and security protocols**.

PROJECTS

TCP & UDP COMMUNICATION AND FILE TRANSFER | ONTARIO TECH UNIVERSITY, OSHAWA, ON

Key Technologies: C, TCP/UDP, Wireshark, VirtualBox, Linux, Socket Programming, Netstat

- Developed **secure client-server** communication with **real-time file transfer** over **TCP/UDP**.
- Achieved 100% data integrity via **TCP** and optimized response latency by 30% via **UDP**.
- Simulated VM-based network environment with **VirtualBox**, and analyzed **traffic** using **Wireshark**.

BRIDGER WEB APPLICATION | ONTARIO TECH UNIVERSITY, OSHAWA, ON

Key Technologies: *React.js, Node.js, MySQL, Express.js, Sequelize*

- **GitHub:** Bridger
- **Built a scalable full-stack app** improving accessibility for 150K+ disabled individuals.
- **Optimized database queries**, reducing response time by 40%.
- One of the top 2 teams out of 30+, winning **Best Project Implementation Award**

IBM WATSONX AI HACKATHON | IBM, MARKHAM, ON

Key Technologies: *IBM Watson Assistant, AI Prompt Engineering, IBM Cloud*

- Led development of **AI-driven prompts** to streamline documentation navigation, boosting efficiency by 90%.
- **Integrated user feedback**, refining models for improved accuracy and usability.

ADDITIONAL EXPERIENCE

INSTRUCTOR | CODE-IT HACKS/LOGIC FUSION, TORONTO/MARKHAM   📅 **MAY 2021 – PRESENT**

Key Technologies: *Python, Java, C++, Lua, Scratch, HTML/CSS, Google Labs, Roblox, Minecraft, LEGO Robotics*

- **Designed & delivered coding courses** for up to 30 students, covering **AI, game dev, and full-stack programming**.
- Taught programming via **Minecraft, Roblox, and LEGO robotics**, fostering hands-on learning.
- Provided **technical mentorship**, guiding students through **coding challenges and hackathons**.

EDUCATION

BACHELOR OF ENGINEERING – SOFTWARE ENGINEERING CO-OP   📅 **2021 – 2026**

ONTARIO TECH UNIVERSITY, OSHAWA, ON

- **Relevant Coursework:** Data Structures, Object-Oriented Programming, Web Development, Database Systems, Microprocessors, AI Algorithms, Operating Systems, Computer Networks, Software Quality

IBM CERTIFICATIONS

- Cybersecurity and Data Privacy, AI Fundamentals *(2023)*