

# Shawn Birring

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## TECHNICAL SKILLS

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**Languages:** Python, JavaScript, C#, C, Java, SQL, TypeScript, HTML, CSS

**Tools:** VMware, Active Directory, Docker, Google Cloud Platform, Git, Github Actions, Vercel

**Frameworks/Libraries:** React, Next.js, Express, Node.js, .NET, PyTorch, FastAPI, Tkinter

**Databases:** MySQL, PostgreSQL, Redis, MongoDB, Cloud Firestore, Supabase

## PROFESSIONAL EXPERIENCE

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### Technology Assistant

June 2023 – June 2024 & June 2025 - Present

British Columbia Institute of Technology

Burnaby, BC

- Leverage Active Directory to debug desktop imaging and network issues for new deployments.
- Provide computer hardware and software support to BCIT students, faculty, and staff.
- Automated asset entry with Python scripts for inventory and lifecycle management, reducing manual data entry time by 80% for 1,500+ lab workstations.
- Mentor 5+ new student employees with hands-on training, accelerating onboarding.
- Document and escalate hardware/software issues through comprehensive technical reports.

### Coding Instructor

September – November 2024

Code Ninjas

Surrey, BC

- Taught JavaScript and block coding to 10–15 students (ages 5–14), boosting technical skills.
- Led game development projects, promoting teamwork and creative problem-solving.
- Adapted instruction based on student progress, enhancing learning outcomes and engagement.

## PERSONAL PROJECTS

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### Home Lab | VMware, Ubuntu

June 2024 - Present

- Built Ubuntu VMs on VMware and migrated services into Proxmox containers to prototype home services.
- Configured LAN/WAN settings, installed a managed switch, and set up firewall rules for an OpenVPN deployment.
- Installed and maintained a TrueNAS NAS on a home server for secure remote data access and retrieval.

## EDUCATION

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### British Columbia Institute of Technology

September 2023 – Expected December 2027

Bachelor of Science in Computer Science (Database Option) – GPA 80%

Burnaby, BC

Diploma in Computing Systems Technology (June 2024) – GPA 85%

**Relevant Coursework:** Computer Networks, Operating Systems, Virtualization, Cybersecurity Fundamentals

## ACADEMIC PROJECTS

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### **Phishing Detection Chrome Extension** | Python, Docker, JavaScript, React, MongoDB January – April 2025

- Developed a Chrome extension to scan emails and websites to prevent phishing and malware attacks.
- Implemented Redis caching with MongoDB persistence for sub 3 ms lookups.
- Employed heuristic, pattern, and blacklist detection algorithms with AI enhancement.
- Automated CI/CD for three microservices via GitHub Actions.

### **Object Detection Search & Rescue App** | VMware, Ubuntu, Docker, Python, PyTorch January – April 2024

- Led a 4-person team as Project Manager to develop object detection software for search and rescue operations.
- Leveraged VMware to develop software on Ubuntu VMs, ensuring Linux/Ubuntu compatibility.
- Trained a neural network for aerial detection of various objects resulting in a 50% increase in detection accuracy.
- Optimized image processing, increasing FPS by 60% and improving detection speed and accuracy.

## LEADERSHIP EXPERIENCE

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### **Ball Hockey Referee & Scorekeeper**

Seasonal (April – June) 2020 – Present

Surrey Minor Ball Hockey Association

Surrey, BC

- Awarded the \$500 SMBHA Scholarship for leadership, citizenship, and volunteerism.
- Officiated youth games (ages 7-18), enforcing rules and resolving conflicts to maintain fair play.
- Maintained precise score sheets and game statistics, ensuring accuracy for team records.

### **Taekwondo Instructor**

January 2020 – Present

Kick It

Surrey, BC

- Instruct up to 30 students (ages 3-18) per class, designing and delivering lesson plans for diverse skill levels.
- Organize belt-testing events and managed class logistics, ensuring smooth operations.
- Provide individualized feedback and support, fostering student growth and discipline.