

AKASH SIDHU

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SOFTWARE DEVELOPMENT

Analytical and motivated professional with a solid academic foundation and experience in software development. Explores the capabilities of AI and AR technologies in developing applications, contributing to software development efforts. Collaborates with mentors and colleagues to develop and execute numerous software projects, involving machine learning, AI/AR, database design and creation, and game design, among others. Demonstrates a keen interest in emerging technologies for utilization in software development workflows.

CORE SKILLS & COMPETENCIES

- Game Development
- Software Development Lifecycle
- Project Management
- AI / AR Research & Development
- Web Development
- Object-Oriented Programming
- Team Collaboration
- Full-Stack Development
- Problem-Solving Skills

Technical Acumen: Java | C++ | Unity | Python | C# | HTML | CSS

JavaScript | SQL | React | Git / GitHub

WORK EXPERIENCE

Printer Deployment Technician | Microserve | Burnaby, BC

Oct. 2023 – Present

Worked within a team dedicated to managed print services consisting of deploying printers for FHA, VCH, PHC, ICBC, TransLink and BC Gov, for a refresh program or for a net new installation. Provided technical printer support to project managers of hospitals and new sites to coordinate the rollout printers before the go live date and handling on the spot technical support for printers onsite. Maintained keeping high security and patient confidentiality whilst working with an information sensitive department or location.

My key skills from this role involve on the spot IT printer support, maintaining a professional demeanor while working with client and users alongside providing great client and user relations for the company, keeping patient confidentiality at a top priority and keeping high security for sensitive deployments in confidential departments or locations.

Computer Technician | SSLComputers LTD | Abbotsford, BC

Mar. 2023 – Oct. 2023

Provide technical support to customers by conducting repairs on laptops and desktop computers. Have worked closely with companies like the George Derby Centre, to keep their IT infrastructure up to date and running smoothly. Provide support to small businesses via setting up computers, setting up remote desktop connections, and general IT technical support.

My key skills from this role involve IT support, computer hardware repair, computer software repair, building computers, setting up computers, completing sales, and providing customer service and guidance to clients regarding their devices.

AI & AR Research Assistant | University of the Fraser Valley | Abbotsford, BC

Jun. 2020 – Feb. 2021

Overview: Contributed to software development efforts in the artificial intelligence and augmented reality disciplines, collaborating with the supervising professor on several AI and software projects. Independently perform assigned activities with AR stack in implementing motion tracking into a computer, as well as conducting presentations of project results, and time and task monitoring to ensure completion of all independent and group projects.

Selected Accomplishments:

- ✓ Experimented with how AI and AR technology could be used to help senior adults stay active and maintain a sense of well-being while socially isolating during the COVID-19 pandemic.

- ✓ Successfully developed a program that allowed doctors to record and share virtual models of exercises with their patients, utilizing Unity to translate data into a readable, open-source model, C# to allow the model to react to real-time data, and an Azure Kinect camera to obtain joint data from user movements.
- ✓ Developed an AI companion dog by training an AI model through real-world data to identify unique facial expressions and utilizing a Java API to create responses to different expressions.

Key Responsibilities:

- **AI / AR Research:** Explored and experimented with the capabilities of AI and AR technologies in developing applications, including in the field of elderly care to ensure their physical and mental well-being while socially-isolated during the pandemic.
- **Project Management:** Oversaw all phases of software development, from planning to execution of projects while providing assistance to the team to ensure the success of the project.
- **Team Collaboration:** Coordinated with the team in ensuring that project activities were completed following timelines and milestones as well as ensuring the quality of the output.

Lab Monitor | University of the Fraser Valley | Abbotsford, BC

Dec. 2018 – Feb. 2020

Overview: Provided support to students within the Introduction to Programming & Object-Oriented Programming courses, tutoring them during and after classes to clarify concepts. Assisted students with their assignments, providing guidance and examples to ensure full knowledge of all necessary information. Taught students strategies for debugging code and techniques for approaching coding problems/exercises.

ACADEMIC ACCOMPLISHMENTS

BS Computer Science | University of the Fraser Valley | Abbotsford, BC

2020

Relevant Coursework: Artificial Intelligence | Object-Oriented Programming | Structured Programming | Software Engineering | Database & Database Management Systems | Malicious Software & Attack Prevention | Data Structures & Algorithms | Machine Architecture | Operating Systems | Languages, Computation & Machines | Computers & Society

Sampling of Skills Acquired:

- **Artificial Intelligence:** Developed and honed the skills through learning about AI techniques such as knowledge representation and reasoning, logical inference, machine learning, and practical use of rule-based systems and fundamentals essential for Expert Systems development.
- **Object-Oriented Programming:** Obtained knowledge and essential skills in object-oriented programming and design, with practical, hands-on programming exercises emphasizing the large and complex collaboration of objects.
- **Structured Programming:** Focused on the scientific and numerical applications of implementing algorithms in a procedural programming language through programming exercises and assignments.
- **Software Engineering:** Explored object-oriented and software engineering techniques, software lifecycle, and the Unified Modelling Language (UML).
- **Database & Database Management Systems:** Learned about the theoretical foundations of database design and implementation, normalization and practical design considerations for efficient utilization of database management systems. Acquired knowledge and skills on data modeling techniques and data manipulation languages such as SQL.
- **Malicious Software & Attack Prevention:** Examined the inherent vulnerabilities in computer programs, learning about stack and buffer overflows, race conditions, file operations, string handling, inter-process communication, and injection attacks.