

Anant Khanna

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Education

University of British Columbia, BSc in Engineering	Expected Graduation 2028
Fleetwood Park Secondary School	Sept 2019 – June 2024
• GPA: 4.33/4.33	

Experience

UBC Unmanned Aircraft Systems, Software Developer	Sept 2024 - Present
<ul style="list-style-type: none">Implementing machine learning models and neural networks for aerial systems to enhance autonomous object detection, localization and classificationUtilizing the Ultralytics API for deploying advanced YOLO-based modelsOptimized model performance by calculating and comparing mAP valuesCollaborating with teams to align software and hardware requirements with competition requirements	
Zoom Engineering Ltd., Junior Engineering Intern	April 2024 – May 2024
<ul style="list-style-type: none">Collaborated with clients to design technical requirements, translating complex designs into clear plansDeveloped detailed technical documentation and support plansUtilized tools such as AutoCAD to design floor plans and draft electrical and mechanical requests	
Programming Tutor, President	Sept 2021 – April 2024
<ul style="list-style-type: none">Designed and instructed Python programming courses and game development with UnityPrepared 80+ students for the Canadian Computing Competition by teaching fundamental programming theories and practising DMOJ problems	
Pacific National Exhibition, Concessions Attendant	May 2022 - March 2024
<ul style="list-style-type: none">Provided exceptional customer service, addressing attendee inquiries and resolving issuesOperated the point of sales system and ensured timely food and beverage delivery in a fast-paced setting	

Projects

AI Noise Source Prediction and Forecast	March 2025 - Present
<ul style="list-style-type: none">Developed IoT system using Raspberry Pi 02W to track real-time noise levels across campusImplemented the YAMNet AI model from TensorFlow to classify noise sources in real-timeVisualized audio information using NumPy and MatplotlibCurrently Implementing Python backend with Flask API to publicly display audio information	
Bluetooth Tracking Robot	April 2024
<ul style="list-style-type: none">Developed a robot using a Raspberry Pi to track and follow a remote device by monitoring RSSI signal strengthIntegrated the Sphinx voice recognition module to allow the robot to activate and follow voice commandsImplemented an algorithm to smooth out RSSI signal spikes, improving the accuracy of Bluetooth-based tracking	

Awards

Canadian Computing Competition Certificate of Distinction	2022
District Authority Award	2024
Honour Roll – Fleetwood Park	2019–2024

Technical Skills

Languages: Python, C, SQL, Java, C#

Technologies: Ultralytics, YOLO, MySQL, Unity, Tensorflow, Numpy, Matplotlib