Jad Menkara

🤳 226-758-7556 | 💌 jadmenkara@gmail.com | 🛅 linkedin.com/in/jad-menkara-1593942aa

EDUCATION

Vincent Massey Secondary School

Sep 2022 - Jun 2026

Honour Roll w/Distinction, 4.0 GPA

Windsor, ON, Canada

TECHNICAL SKILLS

Languages: Java, Python, C/C++, JavaScript, HTML/CSS, Kotlin

Software: Fusion 360, Autocad, Inventor, EasyEDA, KiCAD, Autodesk CFD, Unity, Figma, Davinci Resolve, Cura

Technologies: React

Other: Soldering, 3D printing, Calculus/Vectors

Experience

Remote Research Intern

Jun 2024 – Present

Health Research Innovation Centre | neuroArm Medical Robotics Project

University of Calgary

• Designing a novel neurosurgical device remotely

• Creating concept sketches, researching novel robotic solutions, collaborating with engineers on prototype design

Outreach Organizer

Aug 2024 – Present

Hack Canada

University of Laurier

• Organizing a national hackathon with over 350 hackers in 2025

• Currently contacting hundreds of companies to facilitate sponsorship deals

Chapter President

May 2024 - Present

Hack Club

Vincent Massey Secondary School

- Currently developing lesson plans in PCB Design, CAD software, kinematics, and other engineering concepts to prepare students for hackathon competitions
- Currently designing media and merchandise through Figma design software for social media advertising

2x Canada Wide Science Fair Finalist

May 2022, May 2023

Youthscience Canada

Fredrickton, NB | Edmonton, AB

- Selected twice as one of 400 national finalists for the development of scientific research as a young scientist
- Received \$2000 to cover travel costs and participation fees

Projects

Bionic Prosthesis | Python, MicroPython, Fusion 360, EasyEDA, 3D-printing

Jul 2023 - Mar 2024

- Created a modular CAD design in fusion 360 via joints and master sketch techniques
- Manufactured a novel bionic arm through 3D printing and Cura Slicing software
- Designed and soldered a custom PCB carrying a maximum of 20 Amperes of current connected to an SZBK07 buck converter regulator module, a Raspberry Pi Pico Microcontroller, and multiple peripherals

Nerf Gun w/Computer Vision | Pyfirmata, Arduino, YOLOv8, Fusion 360, 3D printing Oct 2023 - Present

- Designed a carriage to house and aim a gell-blaster nerf gun via servo motors using Fusion 360
- Used a pre-trained AI model with Yolov8, Python, and Pyfirmata to track faces and aim the nerf gun accordingly

Awards

Windsor Regional Science Fair (WRSTEF)

Mar 2022 - Mar 2024

- 3x Gold Excellence Award
- 3x Professional Engineers Ontario Award
- 3x An-Noor Inovation Award
- Sanofi Biogenius Canada Award
- Legal Focus LLP Scientific Writing Award

Canada Wide Science Fair (CWSF)

May 2023

• Bronze Excellence Award: Top 60 projects in grades 9-10 nationally

• \$3000 in university entrance scholarships

CEMC UWaterloo Math Contests

Mar 2024

Galois Distinction Award