SYED ASHEMI

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SyedAshemi SyedAshemi syed.tam2016@gmail.com

HIGHLIGHTS OF QUALIFICATIONS

- Proficient in Biomedical signal acquisition and diagnostic data analysis.
- Proficient in software tools, lab procedures, and equipment for analysis, simulations, and experiments.
- Conducted impactful research on cutting-edge biomedical technologies, including 3D bioprinting and tissue engineering.
- Problem Solver, Strong Interpersonal, Critical Thinker, Time Management and Team Work.

EDUCATION

Toronto Metropolitan University (Ryerson) *Toronto, ON*
4^{th} *Year B.Eng Biomedical Engineering* *Sep. 2020 - Apr. 2025*

SKILLS

Programming:	Python, C/C++, Java, JavaScript, HTML/CSS
Tools:	Arduino, CoventorWare, LabVIEW, MATLAB, SolidWorks, Microscope, AUTOCAD, MS Office
Relevant Coursework:	Biomedical Instrumentation, Control Systems Bio-Robotics, Biomedical Signal Analysis, Signals and Systems II, Biomechanics, Bioinformatics

PROJECTS

An Examination Of The Impact Of Cerebromicrovascular Disease On Elderly People With Diabetes *Fall 2024*
- Collaborated with two students to analyze ECG signals from diabetic and control groups using the CVES database, utilizing **MATLAB** for signal processing techniques such as notch filtration, the **Pan-Tompkins algorithm**, and **logistic regression** for signal classification.
- Leveraged MATLAB to extract key features, including **PQRST points** and intervals, to investigate the relationship between diabetes and cerebrovascular health.

Monitoring Heart Rate From Finger-Tip PPG *Winter 2024*
- Crafted a circuit utilizing an **Arduino Nano board** as the microcontroller alongside a 3D-printed SpO2 pulse oximeter probe, innovatively measuring heartbeats per minute from fingertip signals.
- Utilized **LabVIEW** proficiently to meticulously analyze heart rate signals, accurately determining heartbeats per minute.

Signal Processing Of PPG, EMG, ECG, EEG *Winter 2024*
- Utilized advanced signal processing techniques to analyze diverse raw signals, employing **MATLAB** to derive desired outcomes with precision and efficacy.

Arduino Case Competition *Winter 2024*
- Designed and built a self-stabilizing spoon with a team of three, improving usability for Parkinson's patients.
- Researched and implemented optimal circuitry using an **Arduino Nano** and breadboard for precise stabilization.
- Achieved **first-place** recognition for an innovative, spill-free design in competitive trials.

Bio-engineering Organic & Artificial Heart Structures *Winter 2021*
- Collaborated with 8 biomedical engineering peers to research 3D bioprinting with **"FRESH"** technology, creating heart patches from patient DNA to advance heart transplant options.

EXPERIENCE

McKesson Canada - *Pharmaceutical Distribution Technician* *May 2022 - Sep. 2022*
- Processed and fulfilled medication orders for patients in a high-volume, fast-paced setting, ensuring hundred percent accuracy in packaging, labeling, and distribution while working with pharmacists to verify the precision of orders.

KIN's Club - *Tutor* *Dec. 2019 - Dec. 2023*
- Tutoring students in grades 6 to 11 in math, science, chemistry, and physics. Passionate about inspiring young minds and fostering deep subject understanding. Students observe grade improvements and positive shifts in work ethic.