Daniel Olapade

Engineer-in-Training (EIT) · Toronto, ON

olapadedaniel99@gmail.com   (431) 996 6910   danielolapade.com   github.com/danielolapade

EDUCATION

Bachelor of Science in Biosystems Engineering Sept 2018 — June 2024
University of Manitoba Winnipeg, MB

EXPERIENCE

Undergraduate Engineering Research Assistant Jan — June 2024
University of Manitoba Winnipeg, MB

- Collaborated with a multidisciplinary team to assess biosensor sensitivity for detecting bacteria in open wounds
- Investigated the response time of biosensors to various bacterial strains, including P. aeruginosa, E. coli, and MRSA
- Designed ex vivo experimental setups using CAD software to simulate wound environments for biosensor testing
- Developed a novel approach to integrating nanosized biosensor membranes into commercial foam dressings
- Managed project components, including testing protocols, quality control, timelines, and technical documentation

Engineering Internship (R&D) Sept — Dec 2022
Agnora Inc. Collingwood, ON

- Designed and prototyped a gravity filtration system for a glass Dip-Tech printer with a 0.5-micron filtration capacity, achieving potential waste and operational cost savings of up to $10,000 CAD annually
- Collaborated with production teams to develop glass tempering recipes, resulting in reduced roller wave distortions
- Conducted ball drop tests on laminated security glass to evaluate performance in diverse climate conditions
- Prepared CAD models and technical drawings to support product design and modification requests

Engineering Co-op (Safety Compliance) May — Aug 2022
Linde Canada Winnipeg, MB

- Developed an improved process for gas cylinder requalification, achieving 100% compliance with safety regulations
- Analyzed cylinder inspection data to identify failure trends and proposed solutions for targeted maintenance
- Implemented a digital database to track maintenance records, improving quality control accuracy
- Supported Linde's continuous improvement initiatives, focusing on increasing production and minimizing downtime

PROJECTS

Instrumentation System — Arduino, SolidWorks, Sensors, Data acquisition system (DAQ)

- Developed a DAQ system to monitor Manitoba's BAJA performance metrics in real-time during competitions
- Implemented wireless four-wheel drive activation, improving driver control and responsiveness

Interactive Stem Exhibit — Python, Auto-desk Inventor, Actuators, MS office Suite

- Designed and built an interactive exhibit on sustainable aviation fuel for the Royal Aviation Museum of Western Canada
- Integrated microcontrollers and actuators to demonstrate aviation fuel energy density through dynamic movements
- Applied Piezoelectric Transducers to create a fog effect simulating carbon emissions from aviation fuel
- Achieved approximately 85% satisfaction rating from museum attendees during exhibit viewing

SKILLS

Tools & Platforms: CAD (SolidWorks, AutoCAD, Autodesk Inventor), ImageJ, Tableau, Microsoft Office Suite
Programming Languages: ： HTML, CSS, JavaScript, Python

CERTIFICATIONS

Driver's License, First Aid and CPR, Engineer in Training Designation (EIT)