# Soham Desai

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# **EDUCATION**

## **Ontario Tech University**

Bachelor of Engineering - Mechanical Engineering & Co-op Cumulative GPA: 3.53 Awards: President's List Fall 2023 | Dean's List Winter 2024

Relevant Coursework: Engineering Design | Programming for Engineers | Concurrent Engineering and Design | Statics |Thermodynamics | Fluid Mechanics | Dynamics | Computational Engineering Applications | Solid Mechanics | Electric Circuits

# WORK EXPERIENCE

## F AND B SOLUTIONS LIMITED

**Engineering Intern** 

• Improved inventory management by designing an Excel sheet and implementing standardized labeling of spare parts, which prevented items getting misplaced and additionally resulted in 20% faster repair times.

- Diagnosed machine malfunctions through troubleshooting strategies, leading to a reduction in repair time.
- Collaborated with technicians to troubleshoot equipment issues, ensuring timely repairs, and maintaining adherence to schedules

## **Ontario Tech University**

Research Assistant Intern

- Collaborated with graduate students to complete technical diagrams and content for a textbook specific to Battery Management Systems.
- Organized and maintained lab inventory, ensuring accurate labeling and availability of resources for ongoing research.

# **UNIVERSITY PROJECTS**

#### Scissor Lift

- Designed and modeled a 3D SolidWorks assembly of a scissor lift consisting of 433 individual parts and assemblies. •
- Generated detailed engineering drawings with dimensions, tolerances, and assembly instructions for manufacturing.
- Contributed to the virtual prototype by developing motion simulations to demonstrate scissor lift extension and retraction.

## Landing gear

- Designed and modeled a 3D SolidWorks assembly representation of an aircraft's main landing gear consisting of 215 individual standard parts.
- Created detailed CAD documentation, including multi-view drawings with dimensions and tolerances, to facilitate manufacturing.
- Contributed to the virtual prototype by developing motion simulations to demonstrate landing gear deployment and retraction • functionality.
- Collaborated within a supergroup to establish standardized spatial constraints and ensured design compliance with shared dimensions.

## **ACTIVITIES**

## **Reactor Simulation Club**

Reactor Simulation Club Member

- Working with a professor to design a CANDU reactor model in SolidWorks, creating a detailed 3D model for VR-based training simulations.
- Ensuring precision in component modeling to support realistic, immersive training environments for educational and operational use.
- Contributing to the development of innovative training tools to enhance safety and technical understanding in nuclear reactor operations.

## **SKILLS**

Technical Skills: SolidWorks | Fusion 360 | Microsoft Office | MATLAB | Python | C++ | Multisim Certifications & Training: SOLIDWORKS CAD Design Associate (CSWA) | Advanced Manufacturing | WHIMIS

Feb 2024

Oshawa, Ontario, Canada

May 2024 - Jun 2024

Sep 2024

Ontario Tech University

Oct 2023 - Present

Expected May 2027

Oshawa, Ontario, Canada

Kampala, Uganda Jun 2024 – Aug 2024