

THANMAYEE MUDIGONDA

✉ thanmayee.mudigonda@gmail.com

📞 +1 8254370493

🌐 [linkedin.com/in/thanmayee-mudigonda/](https://www.linkedin.com/in/thanmayee-mudigonda/)

Versatile Solutionist

| Deliverer

| Technical Translator

PROFILE

With my diverse engineering background, I have honed the ability to bridge gaps by learning purposefully and delivering efficiently. My software expertise spans mobile and full-stack web development. I also excel at communicating technical concepts to technical and non-technical stakeholders. I am looking for an opportunity where I can capitalize on my skills and diverse knowledge to contribute broadly.

SKILLS

LANGUAGES

Swift / Kotlin / Python / Java / C++ /
JavaScript / TypeScript / HTML / CSS /
SQL

FRAMEWORKS / TOOLS

SwiftUI / XCode
Android Studio
XCTest / Junit / Jest / Espresso /
Mockk
Git Version Control
Node.js
Microsoft Azure
CosmosDB / MongoDB
Django REST
ReactJS
SASS
Jupyterlab
Tensorflow / Keras
Hadoop / Spark
Jira / Confluence / Notion / App Center

EDUCATION

Software Engineering, M.Eng.

University of Calgary
2019 – 2020
GPA 4.00/4.00

Chemical Engineering, M.ASc.

University of Toronto
2017 – 2019
GPA 3.93/4.00

Chemical Engineering, BSc.

University of Calgary
2011 – 2016
GPA 3.50/4.00

WORK EXPERIENCE

Software Developer

Orpyx Medical Technologies Inc. | Nov 2022 – Oct 2023

- Developed new features for mobile apps (iOS and Android) to pair with custom sensory insoles for data acquisition, visualization, and upload
 - Tech stack iOS: Swift, SwiftUI, XCode, Bitrise
 - Tech stack Android: Kotlin, Android Studio, Bitrise
- Key contributions:
 - Designed and built a diagnostic screen (with persistence) that captures sequential updates from Bluetooth insoles (Android)
 - Designed and implemented a diagnostic feature to periodically upload insole health and app usage data to the backend (iOS)
- Verified code quality with unit tests, automated UI tests, and code review
- Revised SOPs and training documents, and conducted sessions for non-technical teams on important app updates

Software Developer

Kinetyx Sciences Inc. | Nov 2020 – Nov 2022

- iOS development
 - Developed new features and bug fixes for an iOS app that pairs with custom sensory insoles for data acquisition, visualization, and upload
 - Tech stack: Swift, SwiftUI, XCode, Bitrise
 - Unit testing using XCTest
 - Improved data transfer process from insoles to iOS device
 - Delivered bi-weekly sprint demos, completed technical/user documentation, and trained new employees on app features
- Full stack web development
 - Developed 70%+ of the frontend of a data management portal (web app) including functionality and UI/UX
 - Tech stack: React and SASS
 - Developed key backend APIs
 - Tech stack: Node.js, Azure, Cosmos DB, Fastify
 - Unit testing using Jest

Software Development Intern

Aranite Inc. | May 2020 - Sep 2020

- Analyzed requirements to design and develop a data collection and visualization platform for monitoring student performance data
 - Tech stack: Django REST (Python) and React
- Designed and developed the entire backend (10+ API endpoints) and select frontend features for viewing aggregated student statistics
- Designed and implemented 14 relational database tables for storage/retrieval of student performance statistics

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LEADERSHIP

Human Values Teacher | 2020-2022

Sri Sathya Sai Baba Center of
Calgary

VP Events | 2018-2019

Chemical Engineering Graduate
Students Association

MC Annual Chemical Engineering Dinner | 2019

University of Toronto
450 Attendees

President, VP Events | 2012-2015

Women in Science and Engineering
University of Calgary

AWARDS

Bert Wasmund Graduate
Fellowship in Sustainable Energy
Research | 2019

University of Toronto Fellowship,
Department of Chemical
Engineering and Applied
Chemistry | 2017, 2018

Dean's List University of Calgary |
2012

INTERESTS

As a proponent of life-long learning, outside of work, you will find me honing my musical skills while pursuing a diploma in Indian classical music. Performing at community events allows me to channel my skills into crafting a captivating finished product, as well as forging meaningful connections with fellow performers and audience. I also find peace in the great outdoors, and love long walks and hikes with my family.

RESEARCH EXPERIENCE

MASc. Student

University of Toronto | Sep 2017 - Aug 2019

- Fabricated thin film solar cell devices using novel organic semiconductor materials for improved device efficiency and durability
- Established laboratory protocol for blade coating techniques using Six Sigma Design of Experiments technique
- Addressed equipment limitations by investigating and implementing a new protocol for film thickness characterization and calibration.
- Showcased research at conferences and symposiums
- Teaching assistant for chemical synthesis laboratory and first year materials science courses

Graduate Researcher

University of Calgary | Nov 2016 - May 2017

- Polydopamine nanostructure synthesis and thin film coating to increase durability of fuel cell catalyst layer

RELEVANT PROJECTS

Calgary Hacks Hackathon

University of Calgary | Feb 2021

- Developed a virtual homeroom using Unreal Engine to provide students a homeroom experience in a virtual environment ([video](#))

National Datathon

Data For Good | Sep 2020

- Analyzed and visualized real data from Nature Conservancy of Canada using Python to provide insight about annual donations received

Airline Reservation System Web Application

University of Calgary | Apr 2020

- Developed a web-based application to simulate an airline reservation system using a Django REST backend, React frontend, and SQL database

Calgary Hacks Hackathon

University of Calgary | Feb 2020

- Developed a web-based application to establish interest-based connections between students and seniors using a Python Flask backend, Angular frontend and Mongo DB database

Energy and Environment Design Project

University of Calgary | Sep 2015 – Dec 2015

- Investigated emission reduction from Alberta electricity grid with renewable energy and modelled grid scenarios using Canadian Energy Systems Simulator (CanESS)