

RANI PHILIP

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(289) 700-4182

10-1285 Bristol Rd W
Mississauga, ON L5V 2H5

EDUCATION

Bachelor of Engineering & Society, Materials Science

Expected completion April 2014

McMaster University, Hamilton ON

- Level III of a five year program that examines the interaction between technology and society, earning a Bachelor of Engineering degree concurrently with Minor in Linguistics
- Registered in the Engineering Co-op program
- Received \$1000 McMaster Entrance Scholarship for high academic achievements

RELEVANT PROJECTS

Failure Analysis

- Led a team of engineering students to conduct **failure analysis** on a broken carabiner by performing mechanical, chemical, and microscopic analysis
- Enhanced **laboratory skills** and knowledge of **material processes** through various lab works in microstructures, sintering, tensile and mechanical tests

Efficiency of Dye-Sensitized Solar Cell

- Gained essential **research skills** by exploring different parameters, particularly cathodes, in producing an efficient dye-sensitized solar cell
- Developed excellent formal report **writing skills**

Engineering Design

- Obtained **design** knowledge of reading and producing engineering drawings that meet ANSI standards by reverse engineering a printer tray, modeling, and assembling it on Solid Edge V20
- Gained essential **teamwork skills** from working as a group to assemble various parts

Pathways

- Superior **communication skills** developed from collaborating with a team of five students to develop an engineering solution to water usage and presented the final product to faculty members
- Built **organizational skills** from keeping weekly minutes of design project

SKILLS

Technical Skills

- Proficient with MS Word, Excel, PowerPoint, and Publisher
- Knowledge of Solid Edge V20, CaRIne Crystallography v3.1, FEMLAB, FactSage
- Experience in MATLAB and C#

Laboratory Skills

- Able to operate Rockwell hardness test machine
- Sufficient knowledge of mounting, polishing, and etching
- Ample knowledge of WHMIS standards and procedures

Language Skills

- Fluent in oral and written English and Malayalam
- Basic knowledge in French

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LEADERSHIP EXPERIENCES

- Event Coordinator of AIESEC McMaster** January 2012 - Present
- **Arranged and hosted** local committee meetings proving **versatility** in the roles able to perform
 - **Cooperative** and **communication skills** utilized in planning and executing events
- Women in Engineering Mentor** September 2011 - Present
- Demonstrated **leadership** by providing guidance to first year female engineering students by connecting with them, sharing experiences, and answering questions
 - Participated in events designed to encourage female high school students to pursue engineering
- Materials Engineering Executive Council Member** September 2011 - Present
- Materials Engineering 3rd year representative
 - **Liaison** between fellow colleagues and the Materials Engineering Council
 - Organized and promoted events by **communicating** to both groups and via the utilization of **networking skills**

WORK EXPERIENCES

- Math and Reading Instructor** January 2008 – August 2011
Kumon, Mississauga ON
- Used **teamwork skills** to work as part of a team to improve reading, writing, and mathematical skills of students of various ages
 - Worked efficiently as the **supervisor** of staffs and students - ensured safe and respectful learning environment, clarified doubts of staffs regarding marking scheme and delivery of material
 - **Trained new employees** on the institutional guidelines and how to efficiently manage time
 - Worked all operational hours of the center during the week while in school and in the summers
- Peer As Teacher Helper (PATH) Program** February – June 2009
St. Joseph Secondary School, Mississauga ON
- Assisted the secondary school teacher in delivering grade nine Academic Mathematics curriculum to a full class of grade nine students for one semester while attending school full time
 - Learned to plan, **organize**, and **initiate** tasks by frequently taking up homework with the entire class, teaching lessons, marking tests, and assisting students on an individual and group basis
 - Showed **flexibility** by being the main supplier of the curriculum in the absence of the teacher
 - **Acknowledged** for commitment to the students and for being an excellent co-worker to the teacher
- Flower Productions and Customer Service Representative** August 2006 – January 2008
Flowers Unlimited, Mississauga ON
- Worked **independently** and with others in the production of various flower arrangements
 - Increased the productivity of sales by **interacting** with customers to promote items
 - Worked up to 25 hours per week while attending school full time

EXTRA-CURRICULAR ACTIVITIES

- **Student Member**, Professional Engineers of Ontario January 2012 – Present
- **Student Member**, McMaster Engineering Society September 2009 - Present