# NUPUR MAHESHWARI

286 Westcourt Place  $\diamond$  Waterloo, Ontario, N2L2R7  $\diamond$  Canada (403) 926-7166  $\diamond$  nmaheshw@uwaterloo.ca

I am Nanotechnology Engineer by education. I am passionate about problem solving and pushing the limits to learn new skills for personal and professional improvement. I am looking to transition into a Business Development and Sales role to grow my career.

#### WORK EXPERIENCE

#### Smarter Alloys

Materials Research Engineer

 $\begin{array}{c} \text{Jan 2017 -May 2018} \\ Waterloo. \ Ontario \end{array}$ 

- · Prototype, test and scale up of custom technical solutions of shape memory alloys for applications in medical devices, automotive and consumer goods.
- · Market research and intelligence for product improvement and materials innovation.
- · Troubleshooting laser equipment, software and hardware for machinery in house.
- · Video production and making powerpoint presentations for trade shows, investors and government agencies.

# University of Waterloo

Graduate Student Researcher

June 2014 - Aug 2016 Waterloo, Ontario

- · Formulated a process for large scale printing of nanowire inks onto textiles for wearables.
- · Presented my research work at 3 conferences and 3 Minute Thesis competition (2016).
- · Outreach, marketing, fundraising and organizing academic and social events (2015-16) for 200 engineering graduate students.

# University of California, Santa Barbara Junior Researcher

May 2013 - Aug 2013 and Sept 2011 - April 2012 Santa Barbara, California

- · Developed a technique to synthesize high performance DNA aptamers for applications in biosensors, reducing process time by 60 hours compared to existing technologies.
- · Worked with a team of 7 scientists and graduate students to organize and publish the research work.

# University of Waterloo

Research Assistant

May 2010 - Aug 2011 Waterloo, Ontario

- · Designed experiments to study the tribology of orthopedic implant materials for spinal and hip implants.
- · Trained co-op students on wear testing machines and protocols for project continuation.
- · Published 5 abstracts and presented 2 posters at 3 international conferences on the research work.

# **PUBLICATIONS**

- 1. Atwa, Y., Maheshwari, N., Goldthorpe, I.A. (2015) "Silver nanowire coated threads for electrically conductive textiles", Journal of Materials Chemistry C
- 2. Wang, J.P., Gong, Q., Maheshwari, N., Eisenstein, M., Arcila, M.L., Kosik, K.S., Soh, H.T. (2014) "Particle Display: A Quantitative Screening Method for Generating High-Affinity Aptamers", Angewandte Chemie 126 (19) 48964901

#### **EDUCATION**

# University of Waterloo

June 2014 - Aug 2016

Master of Applied Science in Electrical and Computer Engineering - Nanotechnology Option

Thesis title: Electrically Conductive Textiles enabled by Silver Nanowires

Advisor: Prof. Irene A. Goldthorpe

# University of Waterloo

Sept 2009 - May 2014

Bachelor of Applied Science in Nanotechnology Engineering, Co-op Program, With Distinction

# Technical University of Denmark, Lyngby, Denmark

Sept 2012 - Dec 2012

International Academic Exchange

#### AWARDS AND SCHOLARSHIPS

- 1. WIN Nanofellowship (10,000\$), 2014, 2015, University of Waterloo
- 2. Ontario Graduate Scholarship (25,000\$), 2015, University of Waterloo
- 3. Oral presentation award, Senior Undergraduate Design Project, 2014, University of Waterloo
- 4. NSERC Undergraduate Research Award, 2011, University of Waterloo

#### TECHNICAL COMPETENCIES

Expertise in Research and Development, Prototype design and Digital Marketing

Software: Microsoft Office (Word, Excel, Powerpoint, Outlook), CAD, MAT-

LAB, LaTeX, Video Editing

Programming languages: G Code, HTML, CSS, Javascript

#### VOLUNTEER AND LEADERSHIP

- 1. Vice President Operations, Waterloo Institute of Nanotechnology Graduate Student Society, University of Waterloo, 2015-16
- 2. Toronto International Film Festival (TIFF) Volunteer, TIFF, Toronto, 2015
- 3. Operations Associate, Engineers in Medicine, University of Waterloo, 2014-2015

#### PERSONAL INTERESTS

# Language skills:

English: Native Hindi: Native German: Beginner