Jaya Gupta

🎓 Nanotechnology Engineering
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SUMMARY
- Research experience working with nanomaterials
- Experience with Python, MATLAB, HTML, CSS, MS Office, UX design tools; currently learning JavaScript
- Proven ability to learn and work quickly through past research work and team projects

EXPERIENCE

Undergraduate Research Assistant, University of Waterloo, Canada   Jan. 2019 - Apr. 2019
- Conducted experiments to develop a novel gene delivery system for treating glaucoma
- Analyzed samples using flow cytometry and microscopy to determine transfection efficiencies
- Wrote reports and Standard Operating Procedures for cell biology procedures to train new volunteers

Undergraduate Research Assistant, Western University, Canada   May 2018 - Aug. 2018
- Fabricated thin films for solar cells using nanocrystals and electrodepositions
- Employed a new wet-chemical process to increase solar cell efficiency by 8% through
- Developed problem-solving skills, ability to learn quickly, and knowledge of semiconductor theory

PROJECTS

SmartHire TechTogether Boston 2019 Hackathon, Boston University   Mar. 2019
- Built an unbiased AI model in Python using the IBM Watson Natural Language Understanding API and open source model Word2Vec for the backend
- Built frontend web-app in HTML, CSS, JavaScript, and Bootstrap; created mock-ups in UXPin
- Won the IBM Research Award and the Liberty Mutual Best Gender Equality Hack Challenge

MeeLia WiCHacks 2019 Hackathon, Rochester Institute of Technology   Mar. 2019
- Trained a mental health voice assistant model using the Google Natural Language API and Python
- Built frontend website using HTML, CSS, and Bootstrap
- Won the MLH Best Hardware Challenge

EnviroKIDS ECOding Hacks 2019, York University, Canada   Feb. 2019
- Built a web-app containing a suite of games using jQuery, HTML, CSS, JavaScript, Bootstrap, and UXPin to improve kids' environmental education
- Won the ECOding Hacks Best Social Impact Hack Challenge

ACTIVITIES

BioTEC 2020 Conference, University of Waterloo   Jan. 2018 - Present
- BioTEC is Canada's top student-run forum for biotechnology & bioengineering
- Successfully secured 400+ applicants and 200 delegates for last year's conference
- Engage with external groups from other universities to form meaningful partnerships as an outreach lead

EDUCATION

University of Waterloo, Honours Nanotechnology Engineering   Sept. 2017 - Apr. 2023
- Candidate for Bachelor of Applied Science Degree in Nanotechnology Engineering
- Relevant Courses: Introduction to Python, Introduction to MATLAB, Probability and Statistics, Materials Science Characterization Lab
- President's Scholarship for an entrance average of above 90%