# **ARIF QURESHI**

25 The Esplanade, Toronto, Ontario E: arif.qureshi@uoit.ca T: 416-897-0095 M: EIT - PEO

### **SKILLS & SUMMARY**

- Excellent verbal and written communication skills developed through technical reports, conference and journal publications, and oral presentations at international conferences
- Experienced in critical safety projects, along with academic courses and experiences on radiation safety
- Strong background in engineering project management developed through extensive academic projects related to: concrete containment vessels, radionuclide transport, root cause analysis, and life cycle assessment, and Gen IV reactor technology
- Extensive (5+ Years) knowledge on radioactive waste management & spent fuel transportation
- Strong background and advanced skills in programming and state-of-the-art engineering design and analysis software including MCNP, UGS NX, C++, and MATLAB acquired through intensive research experiences
- Working knowledge of project management tools and software developed through my current role as a Business Development Manager
- Confident, team player with strong leadership skills acquired through involvement in multidisciplinary research groups and as the elected Engineering Student Society (ESS) president for two consecutive years
- Highly organized, ambitious individual with attention to detail, integrity, and a willingness to learn

### **EDUCATION**

University of Ontario Institute of Technology (UOIT) - Oshawa, Ontario Master of Engineering (Honors) - Nuclear Engineering

**Graduated June 2017** 

- Received a full NSERC Industrial Post Graduate Scholarship (IPS)
- Cumulative GPA: 3.25/4.3
- Relevant Courses: Project Management for Nuclear Engineers, Advanced Shielding Applications, Advanced Nuclear Materials (Design & Chemistry), Regulatory Affairs & Licencing Conditions (OPG NGS), Advanced Topics on Radioactive Waste Management, The Role of Nuclear Energy (Directive Studies), Life Cycle Assessments (Cradle to Grave understanding of the nuclear fuel cycle, reactor, and waste), Advanced Process Control Systems, and Nuclear Safety & Regulations (Taught by John Froats; Previously OPGs chief nuclear engineer)

University of Ontario Institute of Technology (UOIT) - Oshawa, Ontario

Bachelor of Engineering (Honors) - Nuclear Engineering Graduated June 2011

- Led academic design projects related to next generation (Gen IV) nuclear fuel bundles. Research from this project was published at the International Conference on Nuclear Engineering (ICONE-19), winning best student paper in North America.
- Relevant courses: Calculus 1-3, Technical Communications, Advanced Engineering

Mathematics, Nuclear Physics, Fluid Mechanics, Nuclear Power Plant Operations and Simulation, Nuclear Reactor Design, Nuclear Reactor Kinetics, Radiation Protection

#### **WORK EXPERIENCE**

### Business Development Manager - DGS April 2017-Present

- Researched and understood thoroughly new policies, quotes, renewals, policy changes, and audits concerning business
- Data Analytics using software like Excel & Tableau to create a rotating inventory system
- Overseer of company with quotes and production for current and new clients and supplies. (working alongside vendors in Canada and Asia)
- Maintained accurate customer accounts by keeping track of data, personnel information, inspections, audits, and local and state policy changes
- Provided human resources management skills to over 12 boutique stores located across Canada

# Graduate Research & Teaching Assistant – UOIT Sept 2013 – May 2017

- Worked with laboratory supervisors and technicians to develop and improve operating and safety procedures for laboratory experiments
- Operated and supervised mechanical and chemical experiments
- Teaching Assistant for courses: Calculus & Discrete Mathematics
- Invigilated students during midterm and final examinations

# **Summer Developmental Student** – Nuclear Waste Management Organization – Toronto, ON <u>May 2011</u> – October 2011

- Worked with the repository safety group to conduct analysis for the Deep Geological Repositories (DGR) project under the Adaptive Phase Management (APM).
- Using AMBER (compartmental modeling software) to complete safety studies for the geosphere at the DGR.
- Contributed to the Fifth Case Study for a DGR System in Canada for the Canadian Nuclear Safety Commission.

# **Research Assistant** – UOIT Faculty of Energy Systems and Nuclear Science – Oshawa, ON May 2009 – May 2011

- Worked under the supervision of Drs. Igor Pioro and Kamiel Gabriel to design new prototype fuel bundles for Supercritical Water-Cooled Reactors (SCWRs)
- Design of SCWR Bundles with 54 and 64 Element pin layouts, determining various thermodynamic properties such as heat flux, mass flux, and flow rates for the bundles under various operating conditions.

## **Publications**

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- Thermalhydraulic analysis of Uranium Carbide (UC) fuel in 54 and 64-element fuel bundles for SCWRs (2011)
- Thermal Aspects of using Thorium Dioxide (ThO<sub>2</sub>) In a 54 and 64-element fuel bundles designed for SCWR Applications (2012)

### Awards & Honours

- Industrial IPS NSERC Scholarship [Graduate]
- Roy Post G Scholarship for Excellence in Nuclear Waste Management Research
- TD Canada Top 100 Scholarship
- Best Student Paper at the International Conference on Nuclear Engineering (ICONE) 19
- Best Paper North America as presented at ICONE 19

## **Volunteer & Community Outreach**

- Pride Toronto 2016-Present
- PFLAG Canada 2018-Present
- Rainbow Railroad 2017 Present
- Engineers without Borders 2011-Present
- American Society of Mechanical Engineers (ASME) 2009-Present

## **Leadership Roles**

**President** - UOIT Engineering Students Society (ESS)

2009 - 2011

- Was ultimately responsible for maintaining the integrity of the society and it's 1600 engineering student members.
- Ensured compliance with the constitution, by-laws, policy statements and regulations of the UOIT ESS.
- Developed short and long-range plans for the ESS and the engineering students at UOIT.

**Board of Director** – Faculty of Energy Systems and Nuclear Science

2009 - 2011