Xiao Fan Ding, MSc

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# SUMMARY

Xiao Fan is experienced in academic research with a strong foundation in imaging modalities such as MRI and CT in a clinical setting and for non-destructive evaluation. He has demonstrated good ability to collaborate across a wide range of disciplines, including pharmaceuticals, dentistry, agriculture, and tissue engineering among others. He is passionate about scientific communication, teaching, and enjoys working as part of a team.

**Technical Skills:** Microsoft Office | PyTorch | TensorFlow | Keras | MATLAB | Python | Bash | HPC | Adobe Creative Suite | SolidWorks | 3D Rendering | 3D Printing | FEA Modeling | Medical Devices | ISO/ASTM Standards | Bacterial Culturing | Aseptic Technique | GLP

**Soft Skills:** Communication | Academic Writing | Literature Review | Teaching | Multidisciplinary Collaboration | Adaptability | Multitasking | Time Management | Detail Oriented

# EDUCATION

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| 2022 – Present | **PhD Biomedical Engineering,** University of Saskatchewan |
| 2017 – 2019 | **MSc Medical Biophysics,** The University of Western Ontario |
| 2013 – 2017 | **BSc Hons Biology,** Ryerson University |

# PROFESSIONAL EXPEREINCE

**Visiting Researcher** atCanadian Light Source Inc. (Dec 2021 – Present)

* Performed literature review and helped designed experimental methods and SOPs for time-resolved, laminographic, and multi-detector studies.
* Experienced using tensorflow to develop machine learning models for image segmentation and image artefact reduction.

**Research Assistant** at the University of Saskatchewan (Sep 2020 – Present)

* Biocompatible staining using iodine/gold nano particles for hydrogel scaffolds from natural polymers e.g., gelatin and alginate.
* Trained in animal model experiments using rats e.g., acclimation, surgery, post-op monitoring, and euthanasia.

**Graduate Research Assistant** atThe University of Western Ontario (Sep 2017 – Dec 2019)

* Numerical modeling of materials interactions with the magnetic resonance (MR) environment in clinical setting.
* 3D modeling implantable medical devices to analyse the safety in MR environment.
* Analysis of measurement error and uncertainty in standard test methods, e.g., ISO and ASTM standards.

**Teaching Assistant** atThe University of Western Ontario (Sep 2017 – Apr 2019)

* Ran the first-year physics labs of 30-40 student classes (10 hours per week).
* Gave lectures and marked student reports for students in performing university level physics experiments.
* Performed demonstrations to prospective high school students during open house events.

**Undergraduate Research Assistant** at Ryerson University (Sep 2016 – Apr 2017)

* Experimental design for bacterial culturing using aseptic techniques, good laboratory practices.
* Media preparation, autoclaving equipment, and working in biosafe laboratory.

**Summer Intern** atOxiLight Inc. (Apr 2016 – Aug 2016)

* Prepared and presented a pitch for a grant application to the Think Research Corporation.