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

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 at Canadian 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 at The 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 at The 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 at OxiLight Inc. (Apr 2016 – Aug 2016)
- Prepared and presented a pitch for a grant application to the Think Research Corporation.