Yiping Wang

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Education

University of Waterloo — Waterloo, Ontario, Canada
Master of Mathematics in Computer Science — Sept. 2021 – Present

University of Victoria — Victoria, British Columbia, Canada
Honours Bachelor of Science in Computer Science — Sept. 2017 – Apr. 2021

Software Development Experience

Software Developer Intern — May 2021 – Aug. 2021
Global Reach Group — Victoria, British Columbia, Canada
- Database programming and management, and GitLab CI/CD for Gradle and .NET Core projects.

Software Developer Intern — Sept. 2018 – Dec. 2018
Global Reach Canada — Victoria, British Columbia, Canada
- Contributed to a foreign exchange trading and payment platform using Angular and C# ASP.NET Core.

Software Developer Intern — May 2018 – Aug. 2018
Kinsol — Victoria, British Columbia, Canada
- Developed responsive chatbot applications using Python Flask, JavaScript, jQuery, Bootstrap and Rasa.

Research Experience

Research Assistant — Sept. 2021 – Present
University of Waterloo — Waterloo, Ontario, Canada
- Research in high-order optimization methods for weakly-supervised segmentation of biomedical images.

Research Assistant — Sept. 2020 – Apr. 2021
University of Victoria — Victoria, British Columbia, Canada
- Researched the value of training environments and generalization in Multi-agent Reinforcement Learning.

Research Intern — May 2020 – Dec. 2020
Imagia — Montréal, Québec, Canada
- Researched in generative models for lung 3D CT-scans.

Research Intern — Sept. 2019 – Apr. 2020
University of British Columbia — Vancouver, British Columbia, Canada
- Researched in patch-level and WSI-level classification for ovarian carcinoma whole-slide pathology images.

Research Intern — May 2019 – Aug. 2019
University of Victoria — Victoria, British Columbia, Canada
- Researched in patch-level tumour segmentation for the liver carcinoma whole-slide pathology images.

Publications and Projects

Publications — MIDL, ICML, MICCAI, MedIA, JPath
- Multi-agent Summative Assessment Improvement for Unsupervised Environment Design
- Classification of Epithelial Ovarian Carcinoma Whole-Slide Pathology Images Using Deep Transfer Learning
- Synthesis of diagnostic quality cancer pathology images
- Conditional Generation of Medical Images via Disentangled Adversarial Inference
- CT-SGAN: Computed Tomography Synthesis GAN

Projects — PyTorch, TensorFlow, NumPy, Unity
- Deep Reinforcement Learning and Visual Computing for Crowd Navigation
- End-to-End Facial Expression Modifier
- Segmentation of Overlapping Cervical Cells by Joint Level Set Method

Technical Skills

Languages: Python, Java, C, C++, C#, SQL, Scala
Libraries: PyTorch, TensorFlow, Angular, Unity, .NET Core, OpenCV, OpenGL
Tools: Git, Docker, AWS, Linux, LaTeX