Gengyi Sun

 LinkedIn   ORCID   Google Scholar
 https://sungengyi.github.io/   gengyi.sun@uwaterloo.ca

PUBLICATIONS

Full-Length Publications (10 pages or more) in International Conference Proceedings

FSE'24 Gengyi Sun, Sarra Habchi, Shane McIntosh. RavenBuild: Context, Relevance, and Dependency Aware Build Outcome Prediction. *In Proc. of the Int'l Sym. on the Foundations of Software Engineering (ACM)*, pp. 45:1–45:23, Jul. 2024.

ICSE'24 SEIP Gengyi Sun, Mehran Meidani, Sarra Habchi, Mathieu Nayrolles, Shane McIntosh. Code Impact Beyond Disciplinary Boundaries: Constructing a Multidisciplinary Dependency Graph and Analyzing Cross-Boundary Impact. *In Proc. of the Int'l Conf. on Software Engineering, Software Engineering in Practice track (ACM/IEEE)*, pp. 122–133, Apr. 2024.

Theses

MMath Gengyi Sun. Quantifying, Characterizing, and Leveraging Cross-Disciplinary Dependencies: Empirical Studies from a Video Game Development Setting. University of Waterloo, Canada. Dec. 2023.

Blogs

Ubisoft Gengyi Sun. Build Outcome Prediction - Saving Time and Resources. Ubisoft, La Forge, Canada. Apr. 2024.
This blog is published by the official Ubisoft LinkedIn account, which has more than one million followers.

INDUSTRIAL EXPERIENCES

Research and Development Intern *(Ubisoft, La Forge)*   **Toronto**   *Sept. 2022 - present*
Researched the Continuous Integration (CI) process in the context of video games.

   Dependency Graph Analytics
   Formulated empirical analyses to identify changes of higher risks based on the dependency graphs of the video game project.

   Build Outcome Prediction
   Proposed strategies to reduce CI costs and improve CI stability. *Multiple teams at Ubisoft have invested in developing API services to enable internal feedback cycles for this project. This work was also presented at Game Developer Conference 2024, and attracted interests from outside of the company.*

ACTIVITIES

President *Computer Science Graduate Student Association, University or Waterloo*   *Jul. 2024 - present*
Student Volunteer *FSE'24*   *Jul. 2024*
Ubisoft Ambassadors *Hack-The-North 2023*   *Sept. 2023*

PRESENTATIONS

Invited Presentations..

Taming the beast: use ML to curb CI costs *at UDC 2024*   **Montréal** *Feb. 2024*
Ubisoft Developer Conference (UDC) is a Ubisoft internal application-based conference. This talk is broadcast online to all Ubisoft employees globally (800 onsite viewers and 3,469 online viewers).

Paper Presentations...

RavenBuild: build outcome prediction *at FSE'24*   **Porto de Galinhas, Brazil** *Jul. 2024*
Code impact beyond disciplinary boundaries *at ICSE'24*   **Lisbon, Portugal** *Apr. 2024*

AWARDS

SIGSOFT CAPS Travel Grant to Attend FSE'24   *Apr. 2024*
SIGSOFT CAPS Travel Grant to Attend ICSE'24 *1 of 99 awardees*   *Feb. 2024*

EDUCATION

Ph.D, Computer Science *University of Waterloo*   **Waterloo** *May 2024 - present*
Supervisor: Prof. Shane McIntosh
MMath, Computer Science *University of Waterloo*   **Waterloo** *Sept. 2021 - Dec. 2023*
Supervisor: Prof. Shane McIntosh
B. Software Eng *McGill University*   **Montréal** *Sept. 2017 - Apr. 2021*