

# Gengyi Sun

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## 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. 1–24 (To appear), Jul. 2024. Acceptance Rate: 121/483 (25%).

**ICSE-SEIP'24 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. Acceptance Rate: 45/120 (38%).

## Industrial Experience

**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 Analysis

Formulated empirical analysis 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.*

## Activities

**Student Volunteer** for FSE'24 Jul. 2024

**Blog - Build Outcome Prediction - Saving Time and Resources** *Ubisoft La Forge* Apr. 2024

This blog is published by the official [Ubisoft LinkedIn](#) account, which has more than one million followers.

## 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

**Taming the beast: use ML to curb CI costs** at *Ubisoft Developer Conference (UDC) 2024* **Montréal** Feb. 2024

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).

## 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 - resent

Supervisor: Prof. Shane McIntosh

**MMath, Computer Science** *University of Waterloo* **Waterloo** Sept. 2021 - Dec. 2023

Supervisor: Prof. Shane McIntosh

Thesis: Quantifying, Characterizing, and Leveraging Cross-Disciplinary Dependencies: Empirical Studies from a Video Game Development Setting

**B. Software Eng** *McGill University* **Montréal** Sept. 2017 - Apr. 2021