Yee-Jian Tan

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EDUCATION

École Polytechnique — Paris, France
Master of Theoretical Computer Science (Master Parisien de Recherche en Informatique) — *Aug 2023 - Mar 2025*

National University of Singapore — Singapore
Bachelors of Computing with Honours (Computer Science), Distinction (4.48/5) — *Aug 2018 - May 2023*
- Specialization: Algorithms and Computation

Bachelors of Science (Mathematics), Highest Distinction (4.50/5)

EXPERIENCE

Research Intern — May 2022 - Aug 2022
Gallinette, INRIA — *Nantes, France*
- Worked on formalizing Coq's module system in the MetaCoq project, proving fundamental typing properties and correctness of the Coq implementation in Coq itself. Project is continued as my bachelor's thesis (in progress, defending in Apr 2023).
- Developed a full-stack web application using Flask, React, PostgreSQL and Docker to analyze GitHub data
- Explored ways to visualize GitHub collaboration in a classroom setting

Information Technology Support Specialist — Sep. 2018 - Present
Southwestern University — *Georgetown, TX*
- Communicate with managers to set up campus computers used on campus
- Assess and troubleshoot computer problems brought by students, faculty and staff
- Maintain upkeep of computers, classroom equipment, and 200 printers across campus

Artificial Intelligence Research Assistant — May 2019 - July 2019
Southwestern University — *Georgetown, TX*
- Explored methods to generate video game dungeons based off of *The Legend of Zelda*
- Developed a game in Java to test the generated dungeons
- Contributed 50K+ lines of code to an established codebase via Git
- Conducted a human subject study to determine which video game dungeon generation technique is enjoyable
- Wrote an 8-page paper and gave multiple presentations on-campus
- Presented virtually to the World Conference on Computational Intelligence

PROJECTS

Gitlytics | *Python, Flask, React, PostgreSQL, Docker* — June 2020 - Present
- Developed a full-stack web application using with Flask serving a REST API with React as the frontend
- Implemented GitHub OAuth to get data from user's repositories
- Visualized GitHub data to show collaboration
- Used Celery and Redis for asynchronous tasks

Simple Paintball | *Spigot API, Java, Maven, TravisCI, Git* — May 2018 - May 2020
- Developed a Minecraft server plugin to entertain kids during free time for a previous job
- Published plugin to websites gaining 2K+ downloads and an average 4.5/5-star review
- Implemented continuous delivery using TravisCI to build the plugin upon new a release
- Collaborated with Minecraft server administrators to suggest features and get feedback about the plugin

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL (Postgres), JavaScript, HTML/CSS, R
Frameworks: React, Node.js, Flask, JUnit, WordPress, Material-UI, FastAPI
Developer Tools: Git, Docker, TravisCI, Google Cloud Platform, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse
Libraries: pandas, NumPy, Matplotlib