Timothy Solnyshkin

Email: timothy.solnyshkin@gmail.com | GitHub: https://github.com/ParallelVoid
LinkedIn: https://www.linkedin.com/in/timothy-solnyshkin/ | Games: https://banana-byte-entertainment.github.io/

Skills:

Languages: Python, C#, C++, MySQL,TypeScript
Tools: Linux, Docker, Git, GitHub Actions, Prefect, OpenCV, Pandas, Scikit-Learn, Matplotlib
Systems & Hardware: Raspberry Pi, Arduino, TCP/UDP/DNS

University of British Columbia - (2023 - 2028)
Bachelor of Science in Computer Science, Artificial Intelligence Option

Projects

Termwise Schedule Builder (August 2026)
- Built and deployed a **WebMCP**-enabled academic planner that lets AI agents search courses, evaluate prerequisites, generate conflict-free schedules, preview changes, and apply approved plans through five browser-native tools.
- Engineered a client-side scheduling system with prerequisite validation, timetable conflict detection, preference-based ranking, safe preview/apply workflows, undo history, using **JavaScript**.

Fenn - Open Source (December 2025 to July 2026)
- Contributed to a large Python codebase that automates **ML/DL workflows** by providing prebuilt trainers, templates, logging, configuration management
- Improved test coverage by over 30 percent and wrote new modules for this library

NBA Daily Advanced Analytics (August 2025)
- Built an interactive Jupyter Notebook to analyze advanced NBA game statistics for selected dates
- Utilized **Pandas**, **NumPy**, and **Matplotlib** to compare player and team performance metrics
- Integrated data ingestion from the NBA's public API for real-time and historical analysis

Cyberpunk Game Jam 2.0 - Team Lead (July 2025)
- Developed a 3D atmospheric game in 9 days, using **Unity Engine** and **C#,** which resulted in 1st place
- As the team lead, incorporated use of **CI/CD Pipelines** for automation of tests and builds of our game
- Wrote code pertaining to UI elements of the game, reviewed code of teammates before merging their work into the main branch

Fish N' Chimps - Team Lead (May 2024 to July 2025)
- Developed a 2D platform/adventure game, with crafting mechanics, using **Unity Engine** and **C#**
- As team lead, led sprint planning, task management, and bug resolution for team projects
- Mentored teammates and facilitated collaborative development

Py-Sudoku-Maker (December 2024 to April 2025)
- Developed a cross platform **Python** package that is included in **Python Package Index**
- Generates a solved valid sudoku board in a matrix or prints to console
- Designed to be lightweight and easy to install with no complex dependencies
- Added unit tests that run every time a push is made using **GitHub Actions**

Credit Card Payment Prediction Model - Academic Project (June 2025)
- Developed a supervised machine learning model to predict whether users will pay their credit card bills on time
- Compared different models that are part of the Scikit-learn libraries to select the best performing model

Experience

Python Developer Co-op - DarkVision (2026)
- Designed and implemented a project orchestration pipeline, which supported a $50 million operation using SQLite, Prefect & REST APIs
- Handled rewriting a legacy system from Matlab to Python.
- Developed and benchmarked multiple machine-learning classifiers to select the strongest-performing model.

Teaching Assistant - UBC Computer Science (2025)

• Help students understand how to use popular Python libraries such as Pandas and Numpy, as well as using various APIs.

Junior Software Engineer - Foobar Method (2024 - 2025)

• Collected, cleaned and prepared data for data analysis to use for custom CMS.

Math Instructor - Mathnasium (2021 - 2022)

• Expressed clear communication of mathematical knowledge of different levels. Worked remotely and in person with multiple students at once.