Tobias **Pristupin**

SOFTWARE DEVELOPER

St. Louis, MO

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Education

Washington University in St. Louis - Expected Graduation May 2024   *St. Louis, MO*

COMPUTER SCIENCE + MATHEMATICS MAJOR   *08/2020 - 08/2024*

- Attending on a full scholarship as a John B. Ervin Scholar. GPA 3.97/4. Relevant coursework: Data Structures and Algorithms (A+), Discrete Mathematics (A+ and now working as a Teacher Assistant), Linear Algebra (A+), Full Stack Web Development CSE 330 (A+).

Work Experience & Projects

Facebook   *Menlo Park, CA*

UNIVERSITY SOFTWARE ENGINEERING INTERN   *06/2021 - 08/2021*

- Designed and implemented community building Android app that scales to 100k+ users. Used Firebase DB and Cloud Storage, Google NLP REST API, RxJava, Retrofit, Unit Testing.
- Shadowed full time engineers to learn development workflow. Learned Phabricator, best practices for code review and Git.

Lox Programming Language Research Study   *Washington University in STL*

RESEARCHER & DEVELOPER   *2020-2021*

- Developed an interpreter from scratch in C++ for the Lox Programming language as a personal project.
- Created a bytecode compiler and a stack based virtual machine for Lox, also in C++, as an independent research project under the supervision of Professor J. Shidal.
- Implemented my own garbage collection algorithms based on multiple research papers. Benchmarked the algorithms and wrote a research paper summarizing my findings.

Parallel Computing Technology Group   *Washington University in STL*

RESEARCHER   *2021-Present*

- Currently working as a research assistant. My research is focused on the mathematical analysis of parallel scheduling algorithms.

Smart RC Car   *GitHub*

DEVELOPER - PERSONAL PROJECT   *2021*

- Retrofitted old RC car with a Raspberry Pi to control acceleration and steering. RPI acts as a web server that can be controlled via wifi through a phone app.

Minimal Running   *GitHub*

DEVELOPER - PERSONAL PROJECT   *2018-2019*

- Published Android application with 100+ downloads. Allows user to log their running activities and view statistics on their progress. Users can use an account to store their data online.

Volunteering

sErvin   *Washington University in St. Louis*

CO-PRESIDENT   *Jan. 2019 - Present*

- Restarted a community service group within John B. Ervin scholars that had been inactive for 5 years.
- Directed community outreach events with UnhousedSTL for a group of 30 scholars

Skills

Experience with   C++, Java, Python, JS, PHP, HTML/CSS, SQL, MongoDB, Node.js, React, Flask, Apache, Linux, Android Dev, Flutter, Firebase, AWS, RxJava, Arduino, Mathematica, Bilingual (Spanish and English), self taught