

# Tristan Bouchard

## Software Engineer

TristanBouchard.com • TristanBouchard@gmail.com • (425)-505-7508 • Greater Seattle Area

### SKILLS

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#### Programming Languages

C++ | C | Python | C# | Java | Bash

#### Soft Skills

Work ethic | Public Speaking | Critical Thinking | Leadership | Teamwork | Time Management | Working Remotely

#### Programming Skills

Algorithms | Optimizations | Data Structures | Debugging | Cross-Platform Development | Code Reviews

#### Tools

SVN | Git | Doxygen | Valgrind | Perf | Visual Studio | Unity3D | CLion

### FEATURE PROJECTS

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**CSYS (Cross-Platform C++ Custom Console Library)**, Open Source - Team of 2 [↗](#) 2020 - 2020

C++ | Git | Travis CI | Linux | Windows

- Designed how the client interacts with the library's functionality. Expandability and quality of life focused syntax
- Implemented the parsing algorithm for command-line arguments which supported both primitive types and STL containers
- Developed and supported cross-platform compliance for Linux and Windows

**Arc Apellago**, Handshake Firm - Team of 12 [↗](#) 2019 - 2020

**Engine programmer** - C++ | JSON | Git | Azure | Linux | Windows

#### In the Publishing Process for Steam

- Built a custom C++ engine framework for both Linux and Windows
- Wrote a run-time editable Turing complete scripting language and interpreter to increase development with configurable multi-input-actions
- Designed and implemented a templated Event system [↗](#), which was a key component in connecting the engine to the game
- Managed and developed cross-discipline tools and pipelines. Includes a build server, automated scripts for artists and the tedious submission process

**DeltaBlade 2700**, Handshake Firm - Team of 11 [↗](#) 2019 - 2019

**Gameplay programmer** - C | Git | SVN | Windows

#### Greenlit and Published on Steam | Featured at PAX West 2019, 2020

- Built a custom C engine framework for Windows
- Developed the main logic behind projectile combat, along with their interactions between them
- Implemented core gameplay mechanics such as match controllers and win conditions
- Using XInput, wrote the API for user interaction with the keyboard and controllers

### PROFESSIONAL EXPERIENCE

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**Teaching Assistant for Algorithm Analysis and Data Structures**, 2020 - Present

DigiPen Institute of Technology

- Assisted 3rd year students with calculating the run-time of, optimizing, and implementing various advanced algorithms/paradigms

**Teaching Assistant Lead for C Programming**, DigiPen Institute of Technology 2019 - Present

- Assisted 1st year students with the fundamentals of programming in & problem solving with the C language

### EDUCATION

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**Bachelor of Science in Computer Science with a Minor in Mathematics**, Apr 2022

DigiPen Institute of Technology

**Relevant Coursework:** Algorithm Analysis, Data Structures, Operating Systems, Embedded Systems, Networking, Linear Algebra, Discrete Mathematics