**Dustin Van Tate Testa | [dvtt.net](dvtt.net) | [github.com/dvtate](github.com/dvtate) | [linkedin.com/in/dvtt](linkedin.com/in/dvtt) | +14785088225 | Greater Chicago**

## SKILLS

**C++, C (since 2011):** POSIX, pThreads, Qt, GMP, cmake, openmp, gdb, valgrind, sockets, etc.
**TypeScript, JavaScript (since 2014):** WebAssembly, express, WebGL, webpack, WebSockets, echarts, PM2, NPM, etc.
**Linux:** Daily driver since 2015, managing Linux servers since 2016
**Other Languages:** Python, HTML, CSS, SQL, LaTeX, Haskell, POVRay, Spanish, Danish, etc.
**Tools:** Excel, RSS, LaTeX, SVG, git, vim, screen, kdenlive, Wings3D, SketchUp, etc.

## RELEVANT WORK EXPERIENCE

**Software Engineer**, Information Security Corporation                                              *January 2022-Present*
- Joined team working on codebase spanning decades of development with several hundred thousand lines of code
- Worked with layered filesystem driver to transparently encrypt user files using PKI credentials
- Added new, user-friendly UI that integrates with users preferred file managers
- Software used in national security critical applications
- Skills Used: C, C++, Python, Linux, Qt, BASH, RHEL, Packaging & Build Systems, POSIX, PKI, LDAP, CIFS, VMWare

**Freelance Software Engineer/Developer/Consultant,** Upwork                                    *May 2021-September 2021*
Performed a variety of work for many clients while in college.
- Skills used: TypeScript, C, C++, Python, BASH, Haskell, AWS, SQL, Webpack, ORM, System Administration
- Achievements: Upwork's "Rising Talent" and "Top Rated" badges

**Software Developer**, CAEMate                                                                   *June 2020-December 2020*
- Helped Refactor Large Codebase spanning 5 years of development; Worked on 3D editor for [westatix.com](westatix.com)
- Skills: JavaScript, WebGL, WebAssembly, jQuery, C++, Linux, Docker, git, threejs, MVC

**Senior Software Engineer,** StrattyX                                                            *April 2019 – December 2019*
- Reached out to by CEO with a name, logo and dream to democratize algorithmic trading
- Led development of company's software
- Designed and implemented a novel distributed language system to power the company's product
- Built out product at Harvard Innovation Lab; Pitched company at TechCrunch Disrupt 2019 where we were finalists
- Skills used: Startups, marketing, SWE, PM, AWS, SQL, Node.js, React Native, Python, REST, finance, NLP, etc.

**IT Apprentice,** Macon-Bibb Board of Education                                                  *August 2016 – May 2018*
***Summer Camp Councellor***, *Mercer University Creative Computer Camps*                         *2016 - 2018*

## PROJECTS

**Postfix Haskell, [github.com/dvtate/postfix-haskell](github.com/dvtate/postfix-haskell)**                                    *2020 – 2023*
- *A low-level, stack-based, pure-functional language that compiles to WebAssembly*
- *Moving, Tracing Garbage Collector Written by hand in WebAssembly*

**SCL, [github.com/dvtate/SCL](github.com/dvtate/SCL)**                                                                  *2020*
- *A bytecode-compiled language with an comfortable syntax focused on asynchronous operations*
- *Custom Parser, Compiler, VM, Garbage Collector, Event Loop, etc. written in C++*

***Corki Discord Bot, [corki.js.org](corki.js.org)***                                                              *2017 - 2019*
- *A Discord chat bot with over 200k users, a language-based rule-engine, web-portal, RSS forwarding, game integrations, etc.*

**Websites**
- *[ResearchInEnglish.com](ResearchInEnglish.com) (2023) A website that uses AI to write news articles about open-source research*
- *[XSS.software](XSS.software) (2022) A distributed, serverless cloud powered by browser tabs*
- *More: [stonks.bodge.dev](stonks.bodge.dev) (2021), [xTie.net](xTie.net) (2020), [corki.js.org](corki.js.org) (2019), [robobibb.github.io](robobibb.github.io) (2017), [old.dvtt.net](old.dvtt.net) (2014)*

## EDUCATION

**Illinois Institute of Technology**                                                              **Chicago, IL**
B.S.  Computer Science   (GPA: 3.37)                                                              *August 2018-December 2021*
- *2018 Deans List, Heald Scholar*
- *Programming Lead for NASA Robotic Mining Competition Team (2019-2020)*
- *Computer Science Teaching Assistant (2019)*

**Howard High School**                                                                            **Macon, GA**
Foreign Language Pathway; GPA: 3.86 (top 5%); 11 AP classes                                        *August 2014-May 2018*
- Highest Average: AP Computer Science, AP World History, AP Chemistry
- *Clubs: Robotics; BETA, FBLA, News Team, etc.*