DAVID TYLER

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Summary

Inquisitive Computer Engineer with extensive low latency system development experience, strong communication skills, and boundless gumption. Looking for a fulltime senior software development position.

Industry Experience

- **Redline Trading Solutions**—Woburn, MA   2015-Present
  Software Engineer

  - Helped develop an ultra low latency execution gateway to submit orders to over 150 stock exchanges
  - Designed and developed a deterministic low latency multi-protocol exchange with a matching engine
  - Designed a new Pre-Trade Risk product
  - Created unit testing infrastructure within the company's build system and taught other engineers about unit tests
  - Took the initiative to introduce new compiler technologies to the build process including LTO, PGO, and ASAN
  - Created an automated system to test performance of new releases and aggregate the results
  - Implemented various cache efficent datastructures from white papers
  - Worked closely with both customers and exchanges as needed
  - Debugged time critical crashes of the company's massively parallel applications on customer servers

- **Cisco**—Boxborough, MA   2014
  Technical Intern

  - Wrote a modular, extensible python tool to dynamically discover all third party libraries on a system, check for vulnerabilities and updates in the libraries, and generate various reports based on user created templates

- **Clark Solutions**—Hudson, MA   2009-2015
  Junior Engineer

  - Assisted in the design process to build and test new ultrasonic flow meters
  - Designed, wrote, tested, and shipped a GUI application to allow customers to configure an ultrasonic flowmeter over a MODBUS RTU network from their PC

Academic Experience

- **Capstone Project**
  - Created a puzzle game to teach children the basics of logic design and CMOS using physical interconnectable blocks.

Education

- **University of Massachusetts Lowell**—Lowell, MA   Graduated 2014
  B.S. in Computer Engineering   GPA: 3.6
- **Rensselaer Polytechnic Institute**—Troy, NY   2006-2008
  Enrolled in Computer Engineering

Skills

- **Programming Languages:** C, Python, Make, Erlang, LISP, SQL, x86 (SSE), PIC16, MSP430l, VHDL

- **Tools:** vim, git, gdb, llvm, valgrind, pahole, Google Test, Google Benchmark, mercurial, svn, MATLAB, SolidWorks, Multisim, Django, MPLAB, Labview, Eagle PCB, Markdown, LaTeX

- **Financial:** Order Execution, Feeds, Matching, Equities, Options, Futures, FX, Fixed Income, MIFID II, Tick Databases, SOR, Drop Copy, Pre-Trade Risk, Protocol Normalization

- **Protocols:** TCP, Mould UDP, SoupBinTCP, Multicast, ITCH, OUCH, BOE, FIX, ETI, and 120 other financial exchange protocols.

- **Operating Systems:** Linux (Arch, Slax, RHEL, Fedora), OpenBSD, FreeBSD, Windows