ANDREW CHEONG

acheong87@gmail.com

WORK

C++ Developer, Team-lead — 2008 – PRESENT
Fidessa — New York, NY

8+ years coding market data / market access components to interface with 10+ exchanges and dark pools in Canada, *e.g.* TSX, CNSX, and NASDAQ Chi-X. Led a small, agile team with work driven by clients as well as exchanges, covering a wide range of scopes: from debugging stack crashes and optimizing database joins, to whiteboarding order-routing strategies and calling exchanges to clarify changing specifications / regulations.

Some technical accomplishments include: coding a lightweight, ultralow-latency C++ FIX engine from scratch (currently delivering NBBOs to the TSX with 99.5% $<500\mu$sec latency); developing the 1st product to go into production with Fidessa's multicast infrastructure; and being consulted by Aequitas NEO, then an exchange under development, to finalize behaviors not defined by specs (*e.g.* using 64-bit little-endian `int`s vs. ASCII encoding) and for general guidance (*e.g.* typical message rates, failover scenarios).

CTO — 2013 – PRESENT
Kids in the Game — New York, NY

Hired two design firms to build *kidsinthegame.com.* Directed all aspects of development from branding and color palette to back-end CRM and POS requirements. Then outsourced continued development to freelancers. Ongoing responsibilities include: SEO, providing tech services and training for staff (G Suite, WooCommerce, etc.), demoing 3rd-party hosted services to save in-house dev costs, and continuing to provide technological recommendations based on current company resources and outlook.

Developer — 2011 – PRESENT
Global Citizens Travel — New York, NY

Built an ultra-low cost travel booking site from scratch for a start-up of five that operates unique trips around the world, *e.g.* camel-trekking the Sahara, riding elephants in Myanmar, camping the Atlas Mountains, and sleeping on The Great Wall of China.

Developer, Intern — 2006, 2007
Morgan Stanley — New York, NY

Real-time order analysis. Developed a configuration validator and visualizer. (Perl, XML, C# .NET, ActiveX, Flash / ActionScript 3.)

Telephony and video-conferencing. Developed a call-monitoring and administration application. (C# .NET, SIP, H.203, plug-in architectures, multithreaded applications.)

Sys Admin, Assistant — 2005
United States Military Academy — West Point, NY

Replaced RAM, CPU, power supplies; hot-swapped bad disks on RAID devices; tested failover units; renewed backup tapes; wrote WMI / VBScript automation; migrated Win 2000 data servers, print-servers, and Symantec security servers to Win 2003; built new Solaris 10 servers; reimaged hundreds of desktops.
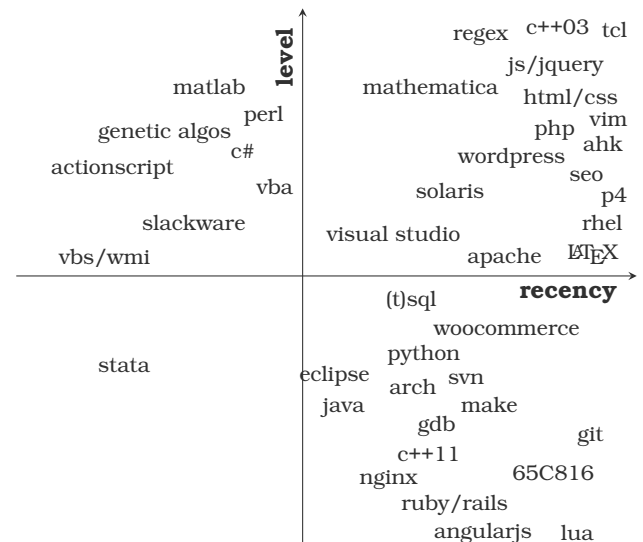
EDUCATION

Rensselaer Polytechnic Institute — Troy, NY
B.Sc. Mathematics and Economics — 2005 – 2008

- 3.87/4.00 GPA. Minors in CS and IT.
- Nat'l Math Honor Society (ΠME).
- Nat'l Physics Honor Society ($\Sigma\Pi\Sigma$).

Cheong, Andrew W., and Supriyo Sinha. *"Evolutionary Computation in Economics and Finance: Models of Decision-Making Systems."* 2008.

Cheong, Andrew W. *"Computational Methods and Optimizations on the Cox-Ross-Rubenstein Model for Options Pricing."* 2007.

SKILLS

INTERESTS

Speedrunning & 65C816

Ported Super Metroid™'s PRNG routine from 65C816 (SNES assembly) to Mathematica. Now analyzing geometry to find RNG manipulations for speedrunners.

Stack Overflow & SOCVR

3rd most active chatroom on Stack Overflow, albeit with a meta / "janitorial" focus. Founder and room owner. 16k rep on SO.

Modern Library Reading Club

Co-founder and host. Alternating between classics and contemporary literature, meeting Tuesdays for discussion. 9 members since 2015, 7 active.