

TREVOR CAPPALLO

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EDUCATION

- UNIVERSITY OF MASSACHUSETTS LOWELL** | Lowell, MA 6/2008 - 6/2013
- Dual Bachelor of Science in Mathematics and Computer Science, Minor in Psychology
 - Graduated cum laude; 3.50 Computer Science GPA, 3.15 Cumulative
 - Researched Machine Learning partial-information game theory techniques to design and code C software capable of playing Hold'em poker at a competitive level
 - Developed AI software utilizing Markov chains and reinforcement learning that successfully taught itself to play optimal blackjack
 - Created a haptic iPhone app allowing screen taps to be transmitted between devices

EXPERIENCE

- SOFTWARE ENGINEER, Verisk Analytics** | Lexington, MA 4/2015 - 3/2017
- Overhauled legacy R code to generate climate based risk reports
 - Developed API for climate simulation data and created visualization tools
 - Designed and coded modular library for logging and auditing production systems; allows for variety of alert conditions and extensible methods of log reporting
 - Worked on multiple backend utilities to support ongoing needs of our DevOps team
 - Utilized AWS to stand up development and production projects
- CHIEF SOFTWARE ARCHITECT & OWNER** | SealsDeals.info 4/2013 - 2/2015
- Independently created software for a Bitcoin-based poker site to add a suite of third-party features; streamlined complex staking arrangements with other players
 - Reverse engineered site's client/server protocol; built autonomous bot to parse text robustly and handle queries concurrently on site chat and IRC/XMPP gateways
 - Primarily pure Python; website updated in real time by utilizing Node.js and Redis
 - Maintained a large user base; integrated a ticket system for customer support
- SENIOR UNDERGRADUATE INTERN ANALYST, Dell, Inc.** | Nashua, NH 6/2011 - 9/2011
- Worked on an enterprise level open-source project built upon the OpenStack framework, allowing turnkey management of many PCs in parallel for server clusters
 - Employed Agile development techniques and project management software, coordinating daily with a group working in tandem out of Austin, TX
- SOFTWARE ENGINEER, MIT Haystack Observatory** | Westford, MA 6/2008 - 2/2011
- Overhauled an in-house data infrastructure and upgraded C utilities for compatibility with new generation of observational data aggregators and correlators
 - Collaborated on configuration of a high-performance system to allow real-time data recording at up to 16Gbps for high resolution observation of black holes
 - Developed various C and Python auxiliary command line utilities and GUIs
- ONLINE POKER PROFESSIONAL** 12/2002 - 1/2007
- Designed and implemented autonomous, adaptive poker-playing programs; accumulated huge database of hands, allowing extensive data mining and opponent modeling; conducted related investigations into game and information theory
- QA SOFTWARE ENGINEER, Traxit Technology** | Littleton, MA 9/2000 - 3/2001
- Java development of QA software for Traxit's VPN replacement, SecureTunnel

SKILLS

- Information theory, number theory, decision making under uncertainty
- Python/NumPy/conda/Tornado, C/C++/Java, HTML/CSS/JS/Node, Apache/nginx/PHP/LAMP, Redis/mongo/SQL, VB6, sysops/shell-scripting, Docker/AWS, git/svn/hg
- Spanish (Intermediate), French (Intermediate), Esperanto (Advanced)