Erick Lin

elin42@gatech.edu · 3698 Lakeview Dr, Tucker, GA 30084 · (423)218-7907
Website: ericklin.github.io · **LinkedIn**: linkedin.com/in/elin42 · **Github**: github.com/ErickLin

OBJECTIVE

To obtain a Software Development Engineering internship in the summer of 2017

EDUCATION

Georgia Institute of Technology, Atlanta, GA — Aug 2014-

- Bachelor of Science in Computer Science, May 2018 (expected)
- Bachelor of Science in Mathematics, May 2018 (expected)

Dobyns-Bennett High School, Kingsport, TN (graduated as a junior) — 2011-2014

EXPERIENCE

Distributed Computing Group, Parasol Laboratory, Texas A&M University — May-Aug 2016

- Advised by Dr. Jennifer Welch and supported by $6000 NSF stipend
- Gave correct, fast data structure implementations in partially synchronous message-passing systems, proving their upper and lower bounds
- First-author publication in preparation – "Linearizable relaxations of stacks and their generalizations to ordered data structures"

Robot Learning Lab, Georgia Tech Institute for Robotics and Intelligent Machines — Oct 2014-

- Advised by Dr. Byron Boots
- Characterizing the quantum version of hidden Markov models (HMMs) for improved parameter estimation
- Developing a completely linear recurrent neural network architecture in Caffe for fast segment-based multiple object tracking
- Recipient of **President's Undergraduate Research Salary Award** (x2)

LAMP Stack Internship, Cresca Group, Norcross, GA — May-Aug 2015

- Led development team to complete back-end of web application that processes and standardizes order information from various online sales channels and handles RESTful communications with their APIs

Laboratory for Computational Neurodiagnostics, Stony Brook University, NY — Jun-Aug 2014

- Advised by Dr. Lilianne Mujica-Parodi and Dr. Jaime Ide
- Developed an engaging graphical pattern detection task and constructed Markov decision processes which successfully captured human decision making under conditions of ambiguity

HONORS/AWARDS

Received offer for **Amazon SDE Internship** — Summer 2016

ConocoPhillips Innovation Challenge, Bartlesville, OK — Apr 2015

- **3rd** place for developing a wearable technologies-interfacing Android application that utilizes server push and REST-style alerts to notify workers of location when someone could be in critical condition
- 1 of 16 students invited in total

National Collegiate Research Conference, Harvard University, Cambridge, MA — Jan 2015

- Accepted for poster presentation – "Individual variability in pattern recognition and set shifting under the influence of ambiguity priming"

Simons Summer Research Program, Stony Brook University, NY Jun-Aug 2014

- Considered one of the most competitive programs of its kind in the nation
- Project selected as **semifinalist** in **Siemens Competition** and advanced to international level at **Intel International Science and Engineering Fair**

National Advanced Placement Scholar, **National Merit Finalist** 2014

Governor's School for Computational Physics, Clarksville, TN Jun 2013

- Employed high-precision equipment and numerical methods to approximate solutions to intractable problems in classical and modern physics

SKILLS

Sampling of Coursework:	**Graduate:** Machine Learning Theory, Advanced Operating Systems **Undergraduate:** Compiler Construction, Processor Design, Operating System Engineering, Honors Algorithms I & II, Quantum Computing and Quantum Information, Real Analysis, Abstract Algebra, Topology, Combinatorial Analysis, Thermodynamics
Programming:	Java, C++, C, Haskell, Octave/MATLAB, Javascript, MySQL, MIPS and x86 assembly, Bash/shell, Verilog, LaTeX, Fortran
OS/Software:	UNIX/Linux (Ubuntu, Arch), Git, Vim, Emacs, GDB, Gradle, Android Studio
Hardware:	Altera FPGAs

ACTIVITIES/LEADERSHIP

President, **ACM Programming Team** Aug 2016-

- Member, **ACM Programming Team** Aug 2014-

Programming Competitions:

- **ACM-ICPC Southeast USA Regionals** – Top 14 in Division I Nov 2015
- **TopCoder** rating: Yellow (Div. 1, second highest rating level)
- **Codeforces** rating: Blue/Expert (Purple/Candidate Master under old system)
- **Zenhacks**, HackerRank (hosted by Zenefits) – placed 92/1173 Feb 2015
- **Algorithms with a Purpose**, ACM@CMU – placed 4/95 Oct 2014
- **USA Computing Olympiad** – qualified for Gold (highest) Division 2013-2014

iTrans VIP, Georgia Institute of Technology, Atlanta, GA Aug-Dec 2014

- Research team implementing self-organizing bus schedule on campus
- Overhauled real-time bus transit map in Javascript, JQuery, and Leaflet

Note Taker, Office of Disability Services, Georgia Institute of Technology Aug 2014-

- Delivered complete lecture and recitation notes for MATH 2605 (Calculus III with Numerical Linear Algebra), MATH 2406 (Abstract Vector Spaces), MATH 2403 (Differential Equations), CS 4510 (Theory of Computation)

Webmaster/Vice President, **SABUR** (Undergraduate Research) Apr 2015-

- Website: sabur.gtorg.gatech.edu

Webmaster, **Runnin' Wreck** Aug 2014-

- Website: runninwreck.gtorg.gatech.edu

Violist, **GT Chamber Strings Orchestra** Jan 2016-

Putnam Competition score: 21