

Edward Gan

750 N Shoreline Blvd, Apt 158
Mountain View, CA 94043

650-666-5685 (phone)
egan@post.harvard.edu

Education

- **Harvard University** Cambridge, MA
A.B. Summa Cum Laude in Computer Science and Mathematics, GPA 3.96 May 2013
 - Senior Thesis on *Type Classes for Substructural Types* with Greg Morrisett and Jesse Tov
 - Awards: Phi Beta Kappa, Detur Book Prize, John Harvard Scholar

Experience

- **Facebook, Inc.** Menlo Park, CA
Software Engineer, Data Infrastructure 2013-Present
 - Built the execution engine and UI for running company data pipelines on past data
 - Taught training sessions on writing data pipelines
- **Programming Languages Research** Harvard CS Dept
Research Assistant, Herchel Smith Fellow 2012-2013
 - Designed a type system to track resources and state through substructural types
 - Implemented type checker with type inference in Haskell
- **CS121: Introduction to Formal Systems and Computation** Harvard CS Dept
Teaching Fellow Fall 2011
 - Helped develop curriculum, led weekly sections, and graded for a sophomore/junior level class
- **LLVM-MD Project** Harvard CS Dept
Research Assistant Spring 2011
 - Developed a new back-end in Haskell to certify programs by translating them into boolean formulas

Publications

- **Type Classes for Substructural Types** Vienna, Austria
E. Gan, J. Tov, and G. Morrisett. July 2014
 - Third International Workshop on Linearity (LINEARITY 2014)
 - Established type soundness for a substructural type system with rich mutable references
- **RockSalt: Better, Faster, Stronger SFI for the x86.** Beijing, China
G. Morrisett, G. Tan, J. Tassarotti, J.B. Tristan, and E. Gan. June 2012
 - ACM Conference on Programming Language Design and Implementation (PLDI 2012)
 - Formalized semantics for Intel and MIPS processors in Coq

Awards

- **ACM Programming Contest, Regional Finals** Rochester, NY
Second Place Team Fall 2010
- **Intel Science Talent Search** USA
Semifinalist (Mathematics) Spring 2009
- **International Physics Olympiad** Hanoi, Vietnam
Gold Medalist Summer 2008

Programming Experience

Proficient with Python, Haskell, Java, OCaml, and C++.