Luke Peeler

peeler.luke@gmail.com ⋄ (317) 721-2811

✆ `http://lpeeler.com`

EXPERIENCE

PEAK6 Investments, L.P. *Chicago, IL*
Software Engineer Jul. 2014–Present

- Designed and developed support automation tool to facilitate service provisioning and monitoring
- Enhanced trading execution system through refactor of existing execution strategies and implementation of new strategies
- Augmented risk-management system with new risk checks at multiple levels of trading execution stack

The MathWorks, Inc. *Natick, MA*
Software Development Intern Jun. 2013–Sep. 2013

- Refactored trie-based data dictionary builder from 20-year-old MATLAB code into Java
- Developed high-level conceptual design for dictionary builder to maximize modularity and long-term maintainability, focusing on in-memory representation of data contained in input C++ header files
- Designed and implemented team-specific bug-tracking dashboard to interface with company-wide bug management system during final two weeks using JavaScript, Dojo, and Python

Department of Computer Science, University of Chicago *Chicago, IL*
Undergraduate Course Assistant Jun. 2012–Apr. 2014

- Corrected and provided feedback on student homework assignments written in Scheme/Racket, C, and Python for introductory programming and systems sequences
- Augmented course lectures with additional guidance during informal office hours and via online course forum
- Developed software infrastructure to interface with student database and facilitate administrative tasks, such as grade collation and auditing using Bash shell scripts

Large Scale Systems Group, University of Chicago *Chicago, IL*
Undergraduate Research Intern Jun. 2012–Aug. 2012

- Designed and executed project to evaluate performance runtimes of original and translated parallel computing benchmarks running on a multicore CPU
- Investigated and tested features in C++ using the ROSE Compiler Infrastructure to determine its compatibility with OpenMP, OpenCL, and CUDA parallel programming models

Research Experiences in Mathematics Program, University of Chicago *Chicago, IL*
Undergraduate Researcher Jun. 2011–Aug. 2011

- Participated in graduate-level courses on linear algebra, combinatorics, and nonlinear dynamics
- Investigated and authored expository paper on metric spaces and various applications, including the contraction–mapping principle

EDUCATION

The University of Chicago   *Chicago, IL*
M.S. in Computer Science   Aug. 2014

- *Grade Point Average*: 3.78/4.00
- Master's paper: "Visualization and Analysis of Digital Light-Sheet Microscopy"

The University of Chicago   *Chicago, IL*
B.S. in Computer Science, B.S. in Mathematics   Jun. 2014

- *Grade Point Average*: 3.80/4.00
- *Honors*: Dean's List, Carl Gylfe Scholar

ACTIVITIES & LEADERSHIP

Chicago Public Schools–University of Chicago Internet Project (CUIP)   *Chicago, IL*
Technology Assistant   Mar. 2012–Jun. 2013

- Promoted technology integration in classrooms through collaboration and planning with instructors
- Developed technology infrastructure through hardware and software installation and repair
- Prepared and organized technology-centered curriculum components with instructors

Programming for Discovery: Python/Robotics Program   *Chicago, IL*
Student Instructor   Mar. 2012–Jun. 2012

- Collaborated with fellow student instructors and developed curriculum to expose students to rudimentary aspects of computer programming in the Chicago Public Schools
- Guided students through basic programming projects in after-school tutorial sessions
- Introduced students to real-world applications of computer programming using Arduino robotics kits and exploring basic circuit design

SKILLS & INTERESTS

Technical
  Programming & Scripting Languages
    Strong experience with C and Java
    Experience with C++, Python, Bash, and Common Lisp/Scheme/Racket
    Familiarity with Groovy, Erlang, Go, and MATLAB
  Web/UI
    Experience with HTML, CSS, and JavaScript
  Operating Systems
    Strong experience with Microsoft Windows, Mac OS X, and Debian Linux distributions
  Frameworks, Databases, & Version Control
    Experience with Spring and Ext JS
    Experience with SQL/PostgreSQL/SQLite
    Experience with SVN and Git
Language Proficient in conversational Spanish
Interests Current affairs, politics, comedy, reading, and crossword puzzles