

# patrickyoon

software engineer

## about

18 Norfolk Street  
San Francisco, CA,  
94103

me@patyoon.com  
http://patyoon.com  
twitter://patryoon  
github://patyoon

## languages

bilingual Korean/English

## skills

JavaScript  
(jQuery, node.js),  
Python, C,  
Haskell, Git, SVN,  
CSS3 & HTML5

## education

- |           |   |                      |
|-----------|---|----------------------|
| 2012–2013 | <b>University of Pennsylvania</b>   | Philadelphia PA, USA |
|           | <ul style="list-style-type: none"><li>• M.S.E. in Computer Science</li><li>• Graduated with master's thesis</li></ul>                                 |                      |
| 2008–2012 | <b>University of Pennsylvania</b>   | Philadelphia PA, USA |
|           | <ul style="list-style-type: none"><li>• B.S.E. in Computer Science, magna cum laude</li><li>• Eta Kappa Ku, Vice President; Delta Tau Delta</li></ul> |                      |
| 2005–2008 | <b>Korea Science Academy</b>  | Busan                |
|           | <ul style="list-style-type: none"><li>• High School</li></ul>   |                      |

## experience

- |            |   |   |
|------------|---|---|
| 08 2013–   | <b>TellApart Inc.</b>   | Software Engineer                       |
|            | <ul style="list-style-type: none"><li>• Software Engineer starting in August 2013.</li></ul>  |   |
| Spring 13' | <b>University of Pennsylvania</b>   | CIS 505 Teaching Assistant              |
|            | <ul style="list-style-type: none"><li>• Taught graduate-level introduction to distributed systems course.</li></ul>   |   |
| 05–08 12'  | <b>Microsoft Bing</b>   | Software Development Engineering Intern |
|            | <ul style="list-style-type: none"><li>• Built a classifier for deciding query intent in Bing Local Search Team that outperforms the existing classifier by 8.5% in precision and recall on a sample query set.</li><li>• Experimented with ways of mining training data and semi-supervised approaches to label them and compared end-to-end metrics.</li></ul>   |   |
| 03–10 12'  | <b>Emerald Exam (formerly Essaysafe)</b>  | Co-founder                              |
|            | <ul style="list-style-type: none"><li>• Developed a secure in-class testing application that allows students to take in-class exams using their laptops on Chrome Browser and allows professors to grade and give feedbacks to exams saved in cloud storage.</li><li>• Developed native Windows and OS X applications that prevents and reports cheating activities to the professor.</li><li>• Selected as top 20 teams in AngelHack Boston in March 2012.</li></ul> |   |
| Spring 12' | <b>University of Pennsylvania</b>   | CIS 391/521 Teaching Assistant          |
|            | <ul style="list-style-type: none"><li>• Taught upperclassmen/graduate-level intro to Artificial Intelligence course.</li><li>• Ran two make up lectures and Wrote four out of ten weekly assignments.</li><li>• Set up and managed the server for class final project running Ants AI Challenge.</li></ul>  |   |
| 06–09 11'  | <b>Google Inc.</b>  | Software Engineering Intern             |
|            | <ul style="list-style-type: none"><li>• Developed a internal framework that periodically updates visualization for various statistics for AdWords advertisement formats.</li><li>• Implemented a new Search Ads format in Media Ads team and plugged into Google Web Server.</li></ul>  |   |
| Fall 11'   | <b>University of Pennsylvania</b>   | CIS 121 Teaching Assistant              |
|            | <ul style="list-style-type: none"><li>• Taught freshmen/sophomore-level data structures course in Java.</li><li>• Responsibility included weekly recitations, writing and grading assignments and exams.</li></ul>  |   |

- 05 10' - 05 11'    **Linguistic Data Consortium**    Student Programmer
- Improved GUI test tools for machine reading project.
  - Developed web version of standalone tool for annotation of English corpora.
  - Processed Korean newswire data and published corpus. Greatly improved validity by fixing word segmentation issue.
- 04-07 09'    **The Laboratory for Research on the Structure of Matter**    Research Assistant
- Participated in research on reconstruction of Breast Cancer Optical data and MRI image data.
  - Built a C++ library from existing Perl codes that process various types of image data.

## projects

- 2011    **DJ Feed**    [djfeed.com](http://djfeed.com)
- Developed an Android application that allows users to request or vote on upcoming songs to influence the playlist at a party. Developed with a team of two people. Users can rate the now playing song to give feedback to DJ, or check the playlist and ratings at other venues.
  - DJ's can manage the playlist and view users' votes and feedback on desktop application.
  - Won "Biggest Potential award," for application that shows greatest business potential out of 30 total teams.
- 2011    **Bang Search Engine**    [patyoon.com/bang](http://patyoon.com/bang)
- Developed a distributed, scalable web crawler for a peer-to-peer implementation of a search engine with indexing and ranking with team of four people.
  - Analyzed performance varying number of nodes and threads running on a node.

## research

- 2013    **Compositionality of English phrases**    Master's Thesis Final Deliverable
- Studied approaches to mine sentiment data from research paper citations in order to determine the opinion toward the cited papers.
  - Suggested methods and metrics to make observations about how research papers relate to one another using sentiments toward their content and role in citing papers.
  - Generated regression models to make predictions about the future success of a paper based on the current sentiment toward the paper.
- 2012    **Sentiment Analysis of Citations for Research Papers**    Undergraduate Senior Design Project Final Report
- Studied approaches to mine sentiment data from research paper citations in order to determine the opinion toward the cited papers.
  - Suggested methods and metrics to make observations about how research papers relate to one another using sentiments toward their content and role in citing papers.
  - Generated regression models to make predictions about the future success of a paper based on the current sentiment toward the paper.

## awards

2012

**Google Lime Scholarship for Students with Disabilities**

- \$10,000 awarded based on the strength of candidates' academic background and demonstrated passion for computer science.
- Awarded to 14 students.

2008

**Korea Presidential Science Scholarship**

- Full tuition scholarship for 4 years awarded based on the strength of candidates' academic background and research experiences.
- Awarded to ten students annually.