# **experience**

### about

me@patyoon.com www.patyoon.com github.com/patyoon

## languages

English, Korean

### programming

Ruby, Python, Scala, Java, JavaScript, Haskell, Emacs Lisp

#### 03 14' - current Airbnb Inc.

Senior Software Engineer

Machine Learning Infrastructure Team

- Designed and built Redspot, an elastic notebook platform for exploring data, ML model development, training, and diagnostics and supported 300 WAU users including almost all data scientists in the company.
- Designed and built DIS, a framework for building and managing composable Docker images for machine learning and data science.
- Built online serving stack of Zipline, feature management platform that provides a general-purpose feature processing, aggregation, and joining framework.

Guest Growth Team

- Built a framework for storing non-users created by various channels and tracking their notification subscription settings.
- Designed and built Mochi, a scheduling service for prioritizing and sending promotional emails and push notifications.
- Designed and built Newspeak, a translation backend service that improves scalability and reliability of the existing architecture.
- Served as the primary POC for supporting internationalization (i18n) libraries and translation features for all product teams.
- Served as a member of the Sysops team, Airbnb's incident-response organization responding to all SEV-0 incidents.

### 08 13' - 02 14' **TellApart Inc.**

Software Engineer

- Developed ad campaign management and audience targeting tool, including migrating campaign configurations, defining a domain-specific language for targeting rules and optimizing campaign budgeting.
- Other projects include experimentation with new ad formats and canonicalization of product categories.

#### 05–08 12' Microsoft Bing

SDE Intern

- 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.
- Experimented with ways of mining training data and semi-supervised approaches to label them and compared end-to-end metrics.

#### 06–09 11' **Google Inc.**

Software Engineering Intern

- Developed an internal framework that periodically updates visualization for various statistics for AdWords advertisement formats.
- Implemented a new Search Ad format in the Media Ads team and plugged into Google Web Server.

# **education**

2012–2013	University of Pennsylvania M.S.E. in Computer Science	Philadelphia PA, USA
2008–2012	University of Pennsylvania B.S.E. in Computer Science	Philadelphia PA, USA

# **Scholarship**

2012	Google Lime Scholarship for Students with Disabilities	Mountain View, CA
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• Awarded by Google based on the strength of candidates' academic background and demonstrated passion for computer science.

2008 Korea Presidential Science Scholarship Seoul, South Korea

• Awarded by the government of South Korea based on candidates' academic background and research experiences.