

# Emmanuel Lee

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## Employment

### Uber, Software Engineer, *Scheduled Rides*

**Jun 2017–Present**

- Led a cross-team, cross-functional collaboration with Intelligent Matching team. Iteratively designed and implemented new scheduled trip dispatch-timing algorithm that reduced late driver arrivals by 10%. Improved all trip-level OKRs, along with +\$38.3M in annualized incremental gross bookings (+\$1.9M profit).
- Led a year-long migration of all Scheduled Rides core business logic to become an independent service; part of a company-wide re-architecting of the marketplace platform to improve maintainability/performance. Completed various production-readiness projects, including: unit tests, blackbox tests, staging environment.
- Architected the HIPAA-compliant integration of Scheduled Rides for the public launch of Uber Health.

### Uber, Software Engineering Intern, *Uber Eats*

**Aug–Dec 2016**

- Joined Uber Eats' Search team: leveraging data/analytics to help users effortlessly find and discover dishes.
- Led the Search i18n effort, bringing localized search to new burgeoning international markets. Built a search term autocomplete prototype alongside city ops using Elasticsearch, data pipelines and Python scripts.
- Revitalized the Search tab's top categories list with machine-learned ranking—boosting search CTRs by 30%.

### Microsoft, Software Engineering Intern, *Azure AD Gateway*

**Jan–Apr 2016**

- Azure AD Gateway team: a reverse-proxy in front of all AD cloud's identity services, e.g. Office 365 accounts.
- Shipped a complete health/functionality-monitoring solution with comprehensive metrics, test runners, dashboards, alerts, and logs for a critical new distributed web service—ensuring high availability/reliability.

### Microsoft, Program Manager Intern, *Windows Security and Servicing*

**May–Aug 2015**

- Spearheaded the investigation of regressions caused by kernel conflicts between Windows Updates and antivirus/virtualization vendors. These bugs hurt millions of users and devastated Microsoft in the news.

### Connected Lab, Software Engineering Intern

**Aug–Dec 2014**

- Launched Connected Lab's first client project (SNYPR.com): a sports-training app backed by Eric Schmidt's venture fund. Full-stack iOS: from simple CRUD, to interactive workouts, to infinitely-scrolling leaderboards.

### Epson, Software Engineering Intern

**Jan–May 2014**

- Joined a research team using 3D computer vision for classification of deformable objects.

## Education

### Bachelor of Software Engineering, *University of Waterloo*

**2012–2017**

Machine Learning, Neural Networks, Big Data Processing, Computational/Artificial Intelligence, Fuzzy Logic

## Activities and Projects

### SAT-Solver on GPUs, Software Researcher, *4<sup>th</sup>-Year Design Project*

**2016–2017**

- Collaborated with PhD student + professor to accelerate SAT-solving using massive parallelization on GPUs.
- Won the GM Canada Innovation Award, that “recognizes student teams who excelled in their 4<sup>th</sup>-year design projects through collaborative learning, innovative concept development and commercial application.”

### Improving Human-AI Interaction, Software Developer

**Jan–Apr 2017**

- Our team built a model home lighting solution using fuzzy logic to understand requests in natural language.
- Chosen to pilot a new Amazon + UWaterloo partnership which sponsored applications combining AI + Alexa.

## Skills

**Languages:** Go, Python, JavaScript, C++, Scala, Java, SQL, HTML, CSS, C#, .NET, Objective-C

**Technologies:** Hadoop (Spark, Hive), Cassandra, Elasticsearch, git, svn, iOS, Android, Node