

Lucas Chen

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Education

Cornell University, College of Engineering

Ithaca, NY

Master of Engineering, Computer Science

Jan 2019 – Dec 2019 (expected)

Bachelor of Science, Computer Science, Major GPA: 3.75/4.00

Aug 2015 – May 2019

- **Coursework** (*=Teaching Assistant): Algorithms* • Data Structures • Discrete Math • Functional Programming • Machine Learning* • Artificial Intelligence* • Operating Systems • Computer Architecture & Systems Programming • Unix Tools
- **Activities & Awards:** Cornell Presidential Research Scholar • Dean's List

Work Experience

Uber ATG | Software Engineer Intern

May 2019 – Aug 2019 | San Francisco, CA

- Worked on the Autonomy Systems team, refactoring all tasks in the entire codebase to be automatically profiled. This involved enforcing migration to a new profiler to ensure thread safety and A/B testing to evaluate performance tradeoffs on the car.
- Improved an internal log playback tool to properly ingest logs using a multiprocessing solution.

Uber ATG | Software Engineer Intern

Sep 2018 – Dec 2018 | Pittsburgh, PA

- Worked on the Maps team – implementing features and serializations for HD maps used in autonomous vehicles as well as integrating a version map conversion tool into an orchestrated pipeline.
- Developed an end-to-end metrics framework to quantitatively measure contents of a map – attached metrics to the map feature API used by the entire maps team, ingested the metrics into Hive, a data warehouse, via Kafka topic, and generated a dashboard for metric visualization.

Amazon | Software Development Engineer Intern

May 2018 – Aug 2018 | Seattle, WA

- Worked on the AWS EC2 team, automating infrastructure deployment for signing tool version migration using CloudFormation. This consisted of deployment of services such as EC2, S3, DynamoDB, Lambda, and VPC.
- Developed a notification service and created a Jenkins pipeline along with its associated job in order to audit signing tool usage and generate a metrics report.

Foxconn Technology | Software Engineer Intern

Jun 2017 – Aug 2017 | Irvine, CA

- Built a scalable client-server system from the ground up to improve consultant communication with customers.
- Designed a database schema and created associated RESTful webservice using Flask in order to track user data analytics.

Cornell University | Undergraduate Researcher in Machine Learning

Sep 2016 – Current | Ithaca, NY

Worked under Prof. Claire Cardie, Prof. Kilian Weinberger

- Researched calving time prediction models based on sensor measurements of cow activity using random forest and XGBoost.
- Implemented collaborative and content-based recommender systems with deep learning architectures for Netflix prize.

Projects

Text Summarization Using Ensemble Techniques on CNN/DailyMail: Text summarization with a seq2seq model in PyTorch, using an RNN encoder and an LSTM decoder with attention and beam search.

ASCII-Chat: A peer-to-peer, end-to-end-encrypted multi-user video chat application in terminal using colored ASCII rendering with text messaging support, using the OpenCV library.

Relevant Skills

Programming Languages: Java • Python • C++ • C • OCaml • Bash • SQL

Tools & Frameworks: Git • Linux/Unix • Vim • Bazel • Jenkins • AWS • Docker • PyTorch • scikit-learn

Web Development: HTML • CSS/SASS • Bootstrap • PHP • Flask • Jekyll • GraphQL • NGINX • Apache