

## EXPERIENCE

### UCLA NLP

*June 2019 - Present*

*Undergraduate Researcher*

- Investigated learning better sentence representations and contrastive unsupervised representation learning.
- Supervised by Professor Kai-Wei Chang.

### Blend

*September 2017 - September 2018*

*Machine Learning Engineer*

- Deployed a LSTM-RNN model to identify complaints in user comments, improved P/R and accuracy from 70% to 90%.
- Applied deep learning NLP methods to categorize and cluster user reviews.
- Created and maintained lambda architecture event/log ingestion pipeline with PySpark.

### Blend

*June 2017 - September 2017*

*Software Engineering Intern*

- Trained an RNN to [predict loan application submission](#) with 90% accuracy.
- Deployed a multi-user data science toolbox with PySpark support.
- Deployed Airflow with CI/CD to standardize analytics and coordinate ETL jobs.

### NASA JPL

*June 2016 - January 2017*

*Software Engineering and Computing Systems Intern*

- Used DeepDive and MITIE to create RDF triples for a natural language QA system.
- Created several APIs/backends with Flask, Docker, and Elasticsearch.

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## PROJECTS

### [QuickThoughts](#)

- PyTorch reimplementation of QuickThoughts paper by Logeswaran and Lee.
- Achieves SOTA performance on several downstream classification tasks.
- Theoretical analysis on the effect of context size on performance [here](#).

### [DistBelief](#)

- Implemented DownpourSGD (asynchronous distributed training) in PyTorch.
- Reduced training time for AlexNet on CIFAR10 by 50 minutes (45%) vs. single-node SGD
- Wrote small message passing framework on top of PyTorch's native distributed point to point communication.

### [PDB Evaluator](#)

- Wrote query parser and first-order lifted inference algorithm for probabilistic database queries.
- Used SQLite to achieve up to 4x speedup on inference on decomposable queries.

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## EDUCATION

### UCLA

*September 2015 - Expected December 2019*

*B.S. Computer Science, Upper Division GPA: 3.54*

- Coursework: ECE 239AS Deep Learning, CS 269 Natural Language Processing, CS 267A Probabilistic Programming & Relational Learning
- Technical Breadth: Mathematics (Linear Algebra, Real Analysis, Optimization)
- ACM AI President (2017). Received ACM Student Chapter Excellence Award.