Xinyu (Lindsey) Feng

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Education

- **University of Southern California** — Los Angeles, CA
  Computer Science B.S. ; Applied and Computational Mathematics B.S. ; GPA:3.74/4 — *Expected May 2023*
  Courses: *Software Development, Introduction to Computer System, Introduction to Algorithms, Data Structure and Object-Oriented Design, Discrete Methods in Computer Science, Probability Theory, Mathematical Statistics, Topics in Linear Algebra, Fundamental Concept of Analysis, Linear Algebra and Linear Differential Equations, Multivariable Calculus.*

Research Interests

- **Natural Language Processing**: Explainability text generator, human-in-the-loop

Skills Summary

- **Languages**: C++, Java, Python, JavaScript, C, R, HTML, CSS
- **Tools & Framework**: Docker, GIT, MySQL, Bootstrap, scikit-learn, pandas, PyTorch, Django, React
- **Interests**: Anime, video games, Bouldering, classical musics

Experience

- **Ink Lab @ USC, Research Assistant** — Los Angeles, CA
  Mar. 2021 - Now
  - **Named Entity Recognition**: Worked on experimentation of entity recognition models with a five-people team using pretrained models (transformer, BERT and SBERT) with PyTorch. Work appears on ACL 2022.
  - **AI Explainability**: Working on implementation and experimentation on explainable text generator models with Pytorch.
  - **visualization dashboard**: Designed and implemented a visualization dashboard for the process and results of sentiment analysis using d3.js and JavaScript; code integrated into the LEAN-LIFE project.
  - **Web Interface**: developed a web interface for researchers to interact with NLP models and displayed results using bootstrap, HTML and JavaScript.
- **Minds, Machine and Society group @ Dartmouth College, Research Assistant** — Remote
  Nov. 2021 - Jan. 2022
  - **machine human values**: Searched for datasets displaying social values and having clear paragraph-long explanations to feed into the model to explore the explainable text generation. Work appears on NAACL 2022.
- **Momentive (Former SurveyMonkey), Software Engineer Intern** — San Mateo, CA
  Dec 2018 - Present
  - **ML model Integration**: Designed and implemented functions to help assess ML models immediately after survey submission using Python; code integrated into the larger codebase.
  - **Impact**: The project helps assess the response qualities of a survey right after survey submission.
- **University of Southern California, CSCI 170 Course Producer** — Los Angeles, CA
  Jan. 2022 – May. 2022
  - **Tutored 50+ students**: Grading and holding 10 hours of office hour every week to help students understand contents of CSCI 170: Discrete Method in Computer Science.

Projects

- **Handwriting Recognition Model (Pytorch)**: Built a Handwriting recognition model using Multilayered perceptron and MNIST dataset. (June 2022)
- **SalStock (Full-Stack Development with Java, JDBC, HTML, Javascript, Jquery, Java Servlet)**: The program allows users to look up stock info from Tiingo API and conduct stock exchanges. The authentication system supports Google Signin.(May 2021)

Publications

- **Good Examples Make A Faster Learner: Simple Demonstration-based Learning for Low-resource NER (ACL 2022)**: Dong-Ho Lee, Akshen Kadakia*, Kangmin Tan*, Mahak Agarwal, Xinyu Feng, Takashi Shibuya, Ryosuke Mitani, Toshiyuki Sekiya, Jay Pujara and Xiang Ren
- **Aligning Generative Language Models with Human Values (NAACL 2022)**: Ruibo Liu , Ge Zhang, Xinyu Feng, and Soroush Vosoughi

Honors and Awards

- Center for Undergraduate Research in Viterbi Engineering (CURVE) Fellowship : June, 2021 - Jun.2023
- USC Dornsife Dean's List : 2019 - 2022
- USC Viterbi Dean's List : 2019 - 2022