



NATURAL LANGUAGE PROCESSING

MASTER'S DEGREE PROGRAM, UC SANTA CRUZ

The UC Santa Cruz professional master's program in Natural Language Processing provides students with in-depth knowledge of NLP technologies and applications through a combination of classroom instruction and relevant practical projects. Intensive training helps prepare students for successful careers in industry, government, or academia. Companies such as Apple, IBM, Google, and Amazon offer exciting careers for individuals with NLP knowledge and skills.* The M.S. program at UC Santa Cruz will help prepare participants for such a career.



"NLP skills are highly desired in industry, and I'm pleased to be on the industry advisory board for this program."

Yunyao Li, Senior Research Manager with IBM Almaden Research Center

FACTS

- Industry advisors, collaborators, and speakers
- Instructors and mentors with both academic and industry experience
- Systematic education in natural language processing, data science, linguistic theory and machine learning
- State of the art facilities in the center of Silicon Valley
- 1 year program, including a three-quarter capstone project
- UC Santa Cruz NLP students have been placed in top Silicon Valley companies like Google, Facebook, LinkedIn, Amazon, IBM, and others
- STEM degree in Computer Science in Engineering: OPT for international students
- **Application deadline: February 3, 2021**

* As of the time of this printing, there are 6,731 open NLP jobs in the United States (LinkedIn).

FOR MORE INFORMATION AND TO APPLY:
grad.soe.ucsc.edu/nlp

Baskin Engineering  **UC SANTA CRUZ**

COURSE SAMPLING

Three core courses covering morphology, the lexicon, parsing, semantic parsing, discourse and dialogue and applications

Tools of the NLP Trade: Data Collection, Wrangling & Crowdsourcing

Machine Learning for Natural Language Processing

Linguistic Models of Syntax & Semantics for Computer Scientists

A three quarter team capstone project with projects defined by industry mentors on topics such as information extraction, deep learning models for NLP, and question answering

INDUSTRY ADVISORY BOARD

The Industry Advisory Board consists of scientists and practitioners working in the NLP industry. The board provides input on the academic aspects of the program and helps ensure that the program curriculum provides the training that industry wants and needs in the NLP area. Current board members include:

Valerie de Paiva: Topos Institute

Bill Dolan: Microsoft Research

Alon Halevy: Facebook

Ozlem Kalinli: Siri at Apple

Zornitsa Kozareva: Google

Yunyao Li: IBM

François Mairesse: Amazon

Sarangarajan Parthasarathy: Microsoft

Delip Rao: AI Foundation

Sujith Ravi: Amazon Alexa AI

Monica Rogati: Data Science and AI Advisor

Ananth Sankar: LinkedIn

Hadar Shemtov: Google

Amanda Stent: Bloomberg

Gokhan Tur: Amazon

 UCSC_NLP_MS

 BaskinSchoolofEngineering

 UCSCengineering

 ucsc-nlp-ms

HIGHLIGHTED NLP FACULTY

Marilyn Walker: Computational models of dialogue, natural language generation, conversational agents, models of expressive and stylistic variation in language. Fellow of the Association for Computational Linguistics (ACL).

Pranav Anand: Semantics, discourse, pragmatics, syntax and computational linguistics.

Luca de Alfaro: Crowdsourcing, reputation systems, game theory and incentives, formal methods. Featured in The New York Times, Wired, The Register, and more. Co-founder and Chief Scientist of Camio. Founder of CrowdGrader.

Jeffrey Flanigan: Semantic parsing, language generation from semantic structures, deep learning and machine learning, representations of meaning, machine translation, summarization.

Jean E Fox Tree: Models of spontaneous language, discourse markers, multimodal language production and interpretation, human computer interaction, language processing, speech. Featured in The New York Times, ABC News, and Science Today.

Lise Getoor: Entity resolution, information extraction, machine learning, reasoning and planning under uncertainty, data science for social good, artificial intelligence. Fellow of the AAAI. Director of the UCSC D3 Data Science Research Center.

Dilek Hakkani-Tur: Conversational AI, natural language and speech processing, spoken dialogue systems, and machine learning for language processing.

Yang Liu: Machine learning, artificial intelligence, crowdsourcing, economics & computation, fairness & security in AI.

Jalal Mahmud: Applied machine learning, data mining, computational user modeling, intelligent user interface, web analytics, social media analysis.

Narges Norouzi: Machine learning, AI, deep learning.

Adwait Ratnaparkhi: Conversational systems, computational advertising, machine learning.

Xin (Eric) Wang: Embodied AI, grounded natural language processing, computer vision, and machine learning.

Yi Zhang: Conversational search and recommendation, information retrieval, text mining, machine learning and AI. Co-founder and CTO of Rulai. Advisor for startups and consultant for companies such as HP, Alibaba, and Toyota.

BASKIN SCHOOL OF ENGINEERING

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