

COLLEGE OF INFORMATION Department of Linguistics



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The University of North Texas (UNT) is a major public research university committed to advancing educational excellence and preparing students to become thoughtful, engaging citizens of the world. UNT is one of the nation's largest public universities, the third largest public university in the state of Texas, and the most comprehensive university in the Dallas-Ft. Worth Area.

UNT enrolls more than 40,000 students, including almost 3,000 international students representing more than 120 countries. UNT has the most degree choices in the North Texas region with 113 Bachelor's, 94 Master's, and 37 Doctoral Degrees, many of which are nationally and internationally recognized.

UNT Linguistics is supported by an active linguistics research community with ties across campus and with local, national, and international communities. Our faculty engage in national and international collaborative research in computational linguistics, language variation, language documentation, and language acquisition and teaching.





UNT COLLEGE OF INFORMATION Department of Linguistics

G R A D U A T E A C A D E M I C C E R T I F I C A T E

COMPUTATIONAL LINGUISTICS

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WHO IS THIS CERTIFICATE DESIGNED FOR?

- Working software development professionals who wish to add NLP technology to their set of skills
- Graduate students (in Linguistics, Computer Science, or other departments) who are interested in language technology
- Postgraduates who may wish to explore CL but are not yet ready to commit to pursuing a full Master's degree in the field
- (Once fully online) International students looking for distance education in CL where such programs are not yet readily available

ADMISSIONS

Certificate applicants who are not currently UNT students will need to apply to the Toulouse Graduate School. Certificate-only students are not required to take the GRE. More information can be found here:



Ready to apply? Scan this code to take you directly to ApplyTexas:



COURSES

Semester One

LING 5040 Principles of Linguistics

> 3 Credit hours Online Delivery

LING 5410 Computational Linguistics 1

3 Credit hours Blended Delivery (Frisco Campus)

Semester Two

LING 5412 NLP in Linguistics

3 Credit hours | 8 Week Session 1 Blended Delivery

(Frisco Campus)

LING 5415 Computational Linguistics 2

3 Credit hours | 8 Week Session 2 Blended Delivery

(Frisco Campus)

OVERVIEW

The brand-new Graduate Academic Certificate (GAC) in Computational Linguistics (CL) is a four-course (12 credit hour) graduate certificate program. CL and Natural Language Processing (NLP) are rapidly growing fields in the high-tech sector, critical for development of such technologies as voice-enabled smart phones and home assistants.

The certificate is specifically intended to address a growing need for language processing skills, particularly those associated with the rapid growth of artificial intelligence technologies. Systems like Siri or Alexa are built on a pipeline of language processing technologies, ranging from voice and speech recognition to language understanding and automatic question answering. Developing such technologies is a complex process that requires knowledge from both Linguistics and Computer Science. Students who complete the certificate will develop proficiency in core methods and toolkits for the automated analysis of language.

WHY?

Language processing is an increasingly necessary skill set for software development professionals, yet it is not part of the standard Computer Science curriculum. Employment in the field of CL/NLP requires knowledge both of Linguistics and of algorithms and methodologies specific to working with language data. The graduate certificate offers a focused, targeted education to students with existing programming skills. This is a better option for working professionals than a traditional master's degree, with its greater investment of both time and money. This certificate is an investment that companies can make in their employees to increase the company's capabilities in data and text analytics. The capabilities gained via the certificate are relevant across the high-tech sector - whenever "smart" technologies aim to interact with their users, language processing is required. They are additionally relevant for marketing analytics, as they allow for rapid analysis of - among other things - customer data, consumer reviews, and social media data.

Software developers with skills in CL/NLP are highly sought after. All of the big tech companies – Google, Amazon, Facebook, Microsoft, Apple, Baidu, and the like – are actively recruiting in this area, as seen by their sponsorship of all of the major CL/NLP conferences. Increasingly, so are smaller tech companies. Jobs are also available in the public sector, from government agencies to academia.