EASTERN UNIVERSITY
DATA PULSE
2023 FALL 1

FROM THE PROGRAM DIRECTOR

I**t's an amazing time to be an Eastern Eagle!** When many smaller schools are struggling - just Google it and you'll see dozens of articles talking about it - we have **doubled our enrollment** in the past four years. We've added football, a new non-traditional undergraduate program, and have many other exciting developments in the works. This excitement is **significantly impacted by our program**, but perfectly characterizes the state of our program more specifically. I'm excited about all the new things we have to bring you in this academic year.

For the first time, we exceeded **400 new MSDS students enrolled in Fall 1**. We have new faculty and staff who you will meet both in classes and over time in the Pulse. As will be outlined later in the Pulse, we've **launched DTSC 685: Natural Language Processing**, one of the most requested areas we've had since the launch of the program. We will be adding significantly **more resources for our "data science for all students,"** including a revamped MS Program page. We're **beginning to create several more in-demand courses** I'm sure you'll love to hear about. And we have promoted **Jamie Andrews to Director of Graduate Programs**, someone for whom enough good things can never be uttered, as many of you can attest.

This is **only the tip of the iceberg**. I couldn't be more proud of the work our team has put forward to prepare for this term. I'm also so excited they feel the same way I do - that we must **continue to expand our offerings and support** for each of you.

Dr. Greg Longo, Program Director

SCIENCE & RELIGION SYMPOSIUM AT PALMER SEMINARY

Artificial Intelligence & Human Spirituality

September 30th, 2023 | 9am-1pm
Warner Library Atrium

Keynote Speaker
Rev. Dr. Erin Raffety

Science & Religion Symposium
Saturday, September 30th
9:00am-1:00pm ET

Dr. Greg Longo and Prof. Amy Huddell
will be speaking on the panel
"...engage in insightful discussions, gain a nuanced understanding of AI's role in shaping our spiritual future, and contemplate its profound implications for the realm of professional ministry. "

Visit this link to RSVP and receive a Zoom invitation.

NEW COURSE ANNOUNCEMENT

We're excited to announce a new course in the MSDS program: DTSC-685 Natural Language Processing (NLP)

Course Overview:
Title: Introduction to Natural Language Processing (NLP)
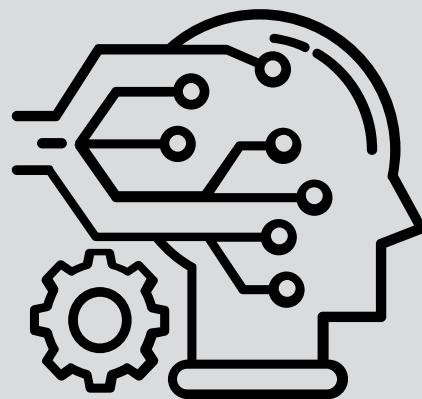**Instructor**: Prof. Amy Huddell, Lecturer of Computer Science
Course Description: This course will introduce the field of Natural Language Processing (NLP) and its related algorithms and ideas. Students will gain experience writing NLP algorithmic code in Python, as well as working through text-based machine learning problems.

What to Expect:
- Learn NLP fundamentals.
- Gain hands-on Python coding experience.
- Solve real-world text-based challenges.
- Stay updated on the latest NLP trends.

Prerequisites:
- DTSC-580 Data Manipulation
- DTSC-670 Foundations of Machine Learning Models
- Solid foundation in Python is recommended

What is your role at Eastern University?

I teach Computer Science at Eastern, which means that I mainly work with the undergraduate Computer and Data Science majors in addition to instructing 680 and 685 for the MSDS program

What is your academic background?

I have a BA in Mathematics from Houghton College and an MS in Computer Science from Villanova University. After graduating with my Master's, I went straight into teaching, so my industry experience mainly comes from internship opportunities that I was blessed with while in school. I did some research on Fairness and Bias in ML at the University of Maryland, which I was able to work on during an internship with Leidos. I also spent a summer collecting, cleaning, and analyzing sports statistics data for sports-reference.com.

Tell us about the new 685 NLP course you created.

685 is a course on Natural Language Processing or NLP. NLP is the field of Computer Science focused on making computers able to process, support, and manipulate human language. We talk about Machine Translation, Text Classification, Sentiment Analysis, and related subjects. It's a very theory-focused class, so be prepared to write a lot of algorithms from scratch!

What sort of research topics interest you the most?

The questions that interest me the most are the ethical, moral, and spiritual questions surrounding Computer Science, Math, and Data Science. How does our Christian faith impact our work in and study of the CS or DS field and how does our work in CS or DS impact our faith? How can our work in CS and DS enhance and encourage faith, reason, and justice?

Any advice for students in the program?

My advice would be to be sure that you value the concepts and theories that you are learning. I know that you are trying to learn applicable skills, but having a deep understanding of the concepts and theories behind these skills is incredibly valuable. This is going to become increasingly more true as generative AI becomes more and more capable. Ask questions, talk to your classmates, and do research on your own. Understanding the concepts taught in these courses will serve you well long after you graduate from this program.

Professor Amy Huddell

Fun Facts:

I really love sports! I played basketball and softball in high school and volleyball at the college level. In my free time, I enjoy going to the gym to lift or playing volleyball whenever I can. I'm a big Philly Sports fan! Go Phillies, Flyers, Sixers and Eagles!

I'm also a nerd for Young Adult Science Fiction and Fantasy series like Harry Potter and the Lunar Chronicles.

I have a twin sister, but we don't know if we are identical or fraternal twins! Also, in case you don't know this already, I'm the daughter of Dr. Walter Huddell of the Mathematics Department here at Eastern.

- **Jacob Nordstrom, GA 520**
- **Ashley Zarcaro, GA 550**
- **Yuan Carrington, GA 550**
- **Ben Pickard, AA 550**
- **Kristin Kenemuth, GA 580**
- **Jesse Hanvey, GA 580**
- **Jacqueline Saquibal, GA 600**
- **Rachel Jones, GA 600**
- **Jessica Keathley, GA 660**

CONGRATULATIONS!

**Amy Berrios,
Academic Advising Manager:**
*EU Staff
Meritorious Service Award*

Professor Jamie Andrews:
Promoted to
*Director of Graduate Programs for
the Mathematics Department*

ADVISING REMINDERS

Term Dates
- FA1 ends Oct. 15th at 11:59pm EST
  - Complete all graded items
  - Grades posted within 1 - 2 weeks
- Last day to drop without financial responsibility
  - Sept. 12th
- Last day of FA1 and withdraw without academic penalty
  - Oct. 15th by 5:00 pm ET
- FA2 begins Oct. 16th

Ready to Graduate?
Complete the <u>Graduation Application</u> during your final term.

Number of Current Students: 2,913
Number of New Students for FA1: 400
Number of Summer Graduates: 185

Important: Updated Billing Statements
Billing Statements are now reflecting the whole semester (Spring, Summer, Fall), not just individual terms. You will notice if you register for both Term 1 and Term 2 classes together, payment will be due at the beginning of the semester for both terms. We recommend registering for courses closer to the start of the term and only registering for one term at a time.

If you are a GA, your financial award is applied per term. If you register for Term 1 and 2 together, you will only see the financial award applied to Term 1. Term 2 credit would be applied after the start date of Term 2. You would either need to drop the Term 2 class or you will need to pay and be reimbursed after the tuition reimbursement is applied.

Please reach out to our advising team or student accounts for more information.