



EASTERN UNIVERSITY DATA PULSE 2024 SUMMER I

FROM THE PROGRAM DIRECTOR

One of my greatest joys in teaching is welcoming students to our University and programs. In our orientation and lower-level courses we really want to help students understand how to engage effectively with their coursework. In live sessions we frequently discuss questions such as "Is there a schedule I should follow?" and "How many hours per week should I spend on each course?" While it's understandable that students wish to maximize efficiency in their work, this can lead to a bit of a problem: focusing solely on "getting through" lectures and assignments can cause important parts of the learning process to be overlooked.

This term I've embraced a new concept: purposeful learning. A purposeful learning approach goes beyond merely completing tasks, like watching lectures and submitting assignments. It requires students to engage deeply with their materials and think about how they are learning, and how to actively improve their learning. This is contrasted with superficial learning which attempts to minimize time spent working, focusing on finishing assignments and watching lectures. Superficial learning is completely understandable, but I'd like to challenge you to reflect on your learning style and consider adopting more purposeful learning habits.

Let's consider a real-life example. Let's say you're working on a relatively complex coding assignment. You feel like you're doing well, and submit to CodeGrade. You see the autograder run and are dismayed that it's not going well. What do you do? How do you tackle these problems? You might immediately look at the first issue and try to fix that problem. Perhaps you are able to debug your code relatively quickly, submit, and earn 100%. That's great! But what do you do after that? If you are engaging in superficial learning, you might simply move on to the next task - the next assignment, video, or move on to another part of your life. But let's see what purposeful learning would look like.

In purposeful learning one would reflect on their learning experience to identify trends. Were the issues in your assignment the result of not taking proper notes? Were issues due to not understanding course content? Were they because you made careless mistakes? Perhaps you identified several coding errors and were able to debug and resubmit successfully. You can then reflect on these observations over time and learn about how you learn. If you notice clumsy errors several times it might tell you to slow down and double-check your work. Alternatively, if you notice your errors are conceptual, it could indicate the need to spend more time with the lecture materials, and perhaps you ask for supplemental learning materials. There are many more formal ways you could engage in this - if you search "purposeful," "intentional," "reflective," or "deliberate" learning you will find variations on this theme. But you will be surprised how quickly you learn about your learning styles.

We all lead busy lives, juggling responsibilities at work, home, and school. It's completely understandable that finding time to reflect can be challenging. However, by engaging in intentional and reflective learning practices, you can enhance your understanding of how to learn most effectively. This approach will save you valuable time in the long run and provide insights that can benefit both your personal and professional life.

DR. GREG LONGO, MSDS & MSDA PROGRAM DIRECTOR



FACULTY SPOTLIGHT

Roots in Eastern University:

I was born, raised, and educated in the Greater Philadelphia Area. My undergraduate degree is from Eastern University, where I obtained a B.A. in mathematics while completing the requirements for the Templeton Honors College at Eastern University. After graduating from Eastern, I enrolled at Villanova University and obtained a M.S. in Mechanical Engineering. It has felt very special for me to come back to Eastern and be involved with the MSDS program.

Favorite Course in the MSDS:

Since being involved with the MSDS, I have been an instructor for 550 and 680. Both are very important classes, but overall I think 680 is my favorite. While being an instructor for 680, I added an (optional) module on Transfer Learning, a machine learning concept which I used in my thesis (check it out when you take the course!) Additionally, I am greatly looking forward to the newly developed Natural Language Processing course, which may become my new favorite!

Research Topics That Interest Me:

While at Villanova, I published two works which connected machine learning techniques with mechanical engineering principles. The first work used the Genetic Algorithm, a very unique machine learning model which is inspired by Darwinian evolution, and shape-memory alloys. The second work used transfer learning and structural health monitoring. Machine learning is a cutting-edge topic, which can be applied to so many different spheres of academia and industry! Currently I am learning more about NLP and the transformer architecture.

Christian Worldview as a Scientist:

I cannot say much about my employment, other than that I am a scientist at NIWC PAC. But as a Christian scientist, I believe that science and faith are perfectly compatible. Too often, individuals get exposed to topics like Darwin (mentioned above) and derive an anti-Christian perspective from these scientific theories. One of the many reasons I enjoyed Eastern University was the freedom to discuss Christ and Christianity in the classroom. Many of these discussions were in liberal arts classes, as well as math classes. I think it can be encouraging to think about Jesus as the Creator and Sustainer of all life, as opposed to an indifferent and distant creator who walks away from its creation.



Luke Megonigal

Fun facts:

- My wife is a full time professor at Eastern University! We enjoy the classic fiction movie franchises like: Lord of the Rings, Harry Potter, Star Wars, and Marvel.
- When at a coffee shop, my favorite drinks are a cappuccino or a latte. When I am home, I usually have drip coffee or homemade cold brew.
- I love to use Lord of the Rings movie quotes out of context.
- I am an extreme novice at electric bass. My favorite bassists are Flea, Sting, and Geddy Lee.
- I enjoy playing nostalgic video games from my childhood, like the Legend of Zelda: Ocarina of Time, the Legend of Zelda: The Wind Waker, and the Halo franchise.

Congrats
CLASS OF 2024!

CONGRATULATIONS FROM PROFESSOR JAMIE ANDREWS



Congratulations to our 2024 graduates! We are incredibly proud of each one of you who has successfully completed our MSDS, MSDA, and MSDS/MBA dual degree programs. Your hard

work, dedication, and perseverance have brought you to this significant milestone, and you should take immense pride in all that you have accomplished

As you embark on the next chapter of your professional journey, we encourage you to never stop learning and to remain endlessly curious about the data-driven world. The fields of data science and analytics are ever-evolving, and your continuous pursuit of knowledge will keep you at the forefront of innovation and discovery. Remember that your education is a lifelong journey, and staying engaged with the latest advancements will ensure that you continue to grow and excel.

It was wonderful to meet some of you in person at commencement. In an asynchronous program, we don't always get the opportunity to interact as much as we would like, so seeing you in person was a special highlight. Please keep in touch with us and remain an active part of the Eastern University family. Connect with us on LinkedIn and stay updated with the community. Your connection to our community does not end with graduation; it is just the beginning of a lifelong relationship. Once an Eagle, always an Eagle!

Jamie Andrews
Director of Graduate Programs

JOHNATHAN MILNER

Johnathan graduated from the Masters of Science in Data Science program in October 2023. Currently, he works as a Senior



Analyst in healthcare, where he heavily utilizes both SQL and Tableau. Additionally, he continues to support DTSC 660 as an Assessment Assistant. Johnathan looks forward to applying the skills he learned during his degree and engaging in continuous learning to further his career in Data Science and Analytics

STEPHEN HUDSON



Stephen Hudson graduated Eastern University with a Master's of Science in Data Science.

He is currently serving as a Senior

Data Scientist with Royce Geospatial Consultants in Springfield, VA. Stephen loves solving difficult problems and holds future aspirations to work in a Machine Learning Engineer role specializing in Computer Vision.

NEW COURSE ASSISTANTS

- **Kristen Perry: FTA 550**
- **Lori Smotryski: GA 550**
- **Derek Mitchler: GA 575**
- **Kelsey Marbach: GA 580**
- **Erika Doogah: GA 600**
- **Rachel McDade: GA 600**
- **Olayinka Adeoya: AA Tech Support**

ADVISING

Term Dates

Withdraw without academic penalty:

- June 30th by 5:00 pm ET

SU1 ends: June 30th at 11:59 pm ET

- Grades posted within 1 - 2 weeks

Important Reminders

- The last day to register for SU2 is Monday, July 7
- The last day to register for Fall 1 is Monday, August 26
- The last day to register for Fall 2 is Monday, October 21


Number of Current Students: 3,283

[Guide to Not Getting Scammed:](#)

Tips from EU's CIO

STUDENT CALENDAR

Student Calendar

 Keep up with all the important dates and make the most of your student journey! Subscribe to [Student: MSDS/DA Calendar](#)

FAITH AND COUNSELING

Counseling and Crisis Services

Services through Uwill are available to all students and include 24/7/365 crisis support.

- [Click here for the Uwill website](#)
- [See the Uwill FAQ](#)
- **Uwill Crisis Line:** 833-646-1526 (outside the US, Canada and Caribbean call +1-984-268-2016)

EU Chapel Livestream:

- [Watch Live Chapel](#)
- [Recorded Chapel \(YouTube\)](#)
- [Chapel Schedule](#)

University Chaplain:

[Dr. Joseph Modica](#)

Contact Us:

General Questions: datascience@eastern.edu

Advising Questions: dsadvising@eastern.edu

Fees and Billing: student.accounts@eastern.edu

Find Us on Social Media:

