Virgil Orr Nomination

Ghislain Nono Gueye, Ph.D.

1 Who I am

My name is Ghislain Nono Gueye and I am an Assistant Professor at the Department of Economics & Finance at the College of Business. I am half Ivorian (Côte d'Ivoire is in West Africa) and half Cameroonian (Cameroon is in Central Africa). I graduated with a Ph.D. in Economics from Auburn University in the summer of 2017 and joined the Tech family in the Fall of the same year. I was initially hired as a Visiting Assistant Professor, then became a tenure-track faculty the following year.

2 Teaching

2.1 Coursework

As an Assistant Professor in the College of Business, I have a teaching load of 4 courses per year: 1 course in the Fall, 1 course in the Winter and 2 courses in the Spring. Overall, I am responsible for teaching 3 *"preps"*:

- **ECON 201: Principles of Macroeconomics** (Spring)
- **ECON 312: Monetary Economics** (Winter and Spring)
- **ECON 485: International Economics** (Fall)

However, I also accepted William Ponder's request for an Independent Study with me in the Spring of 2019 (**BUSN 550C: Global Perspective in Management**). William Ponder was a Finance major I had previously taught in my ECON 201 and ECON 312 courses. Finally, I just developed a new course for the upcoming *Certificate in Data Analytics*, which will be offered soon at the College of Business. The course will be housed by the Department of Economics and Finance and will be listed under the name: **Descriptive and Predictive Analytics**.

2.2 Teaching evaluations

My teaching evaluations have always been stellar as shown by the table below. The maximum possible score for each question (i.e. 4.0) is highlighted in green:

Term	Course	Appropriate examinations	Organized presentations	Expressiveness	Stimulates interest	Explains difficult material	Concerned about learning	Willing to answer questions	Gained greater understanding	Accomplished class purposes	Rating of instructor
Fall 2017	ECON201	3.8	3.8	3.8	3.9	3.8	4.0	4.0	3.8	3.9	3.9
	ECON485	4.0	3.9	4.0	3.9	3.9	4.0	4.0	3.9	4.0	4.0
Winter 2018	ECON201	3.9	3.8	4.0	3.9	3.8	4.0	4.0	3.9	3.9	3.9
	ECON312	3.9	3.7	3.9	4.0	4.0	4.0	4.0	3.9	3.7	3.9
Spring 2018	ECON201	3.8	3.8	3.9	4.0	3.9	3.9	4.0	3.9	4.0	4.0
	ECON312	3.5	3.1	3.4	3.6	3.1	3.8	3.6	3.2	3.4	3.4
Fall 2018	ECON201	3.8	3.8	3.8	3.9	3.9	4.0	4.0	3.7	3.8	3.9
	ECON485	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Winter 2019	ECON312	3.9	3.9	3.9	3.9	3.9	3.9	4.0	4.0	4.0	4.0
Spring 2019	BUSN550C003	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
	ECON312	3.6	3.7	3.5	3.8	3.9	4.0	4.0	3.6	3.7	3.8
Fall 2019	ECON485	4.0	3.8	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Winter 2020	ECON312	4.0	3.7	3.7	3.6	3.8	4.0	4.0	3.7	3.9	3.8
Spring 2020	ECON201	3.6	3.6	3.6	3.8	3.8	3.8	3.9	3.6	3.8	3.8
	ECON312	3.7	3.6	3.7	4.0	3.7	3.9	3.9	3.8	3.8	3.9
Fall 2020	ECON485	3.5	3.3	3.5	3.5	3.3	3.7	3.7	3.2	3.5	3.8
Winter 2021	ECON312	3.6	3.5	3.4	3.6	3.5	3.8	3.9	3.4	3.6	3.4

I obtained the maximum score **54 times out of 153 ((i.e. 35.29%))**. I obtained a 4.0 overall *"Rating of instructor"* in 6 classes. The evaluation question in which I got the most 4.0 scores is *"Willing to answer questions"*.

Even though the table contains all my teaching evaluations, the sheer amount of data makes it impractical to tease out relevant insights. In order to better understand the dynamics of my teaching evaluations, I designed 3 data visualizations. *The design of these visualizations is an illustration of the main pillar of my teaching philosophy, which is to present complex information in more "digestible" ways*. Figure 1 shows the distribution of the scores I obtained for each question in all my evaluations since I came to Tech. The vertical axis shows the evaluations questions and the horizontal axis represents the score scale (i.e. 0 to 4.0). Every small dot represents a score. They are color-coded based on the course in which they were obtained. The large purple dots represent the overall averages of all scores obtained for each question - the average values are also displayed in purple.

The visualization provides an excellent overview of my performance as a teacher. Some of the key take-away points are as follows:

- my lowest individual score is **3.1**
- my highest individual score is **4**
- **84.12%** of all scores are above **3.5**
- my lowest overall average is **3.71** *(Organized presentations)*
- my highest overall average is **3.94** *(Willing to answer questions)*
- my overall average instructor rating is **3.85**

Figure 2 is a visual comparative analysis of my average scores for each evaluation question against 3 composite averages: the *Department of Economics & Finance*, the *College of Business*, and the *University*.

Prior to commenting on my personal performance, I can't help but marvel at the quality of teaching at Louisiana Tech. The composite averages are high, especially given that they are computed with scores obtained by dozens and even hundreds of instructors. For them to be this high means that our fine University is a *talent magnet*, which attracts excellent teachers from everywhere. Therefore, seeing that my personal teaching performance (i.e. the blue line) has consistently been above all composites (for the most part) makes me very proud as a teacher. However, there is a dip at the end of the sample period, and this is explained by

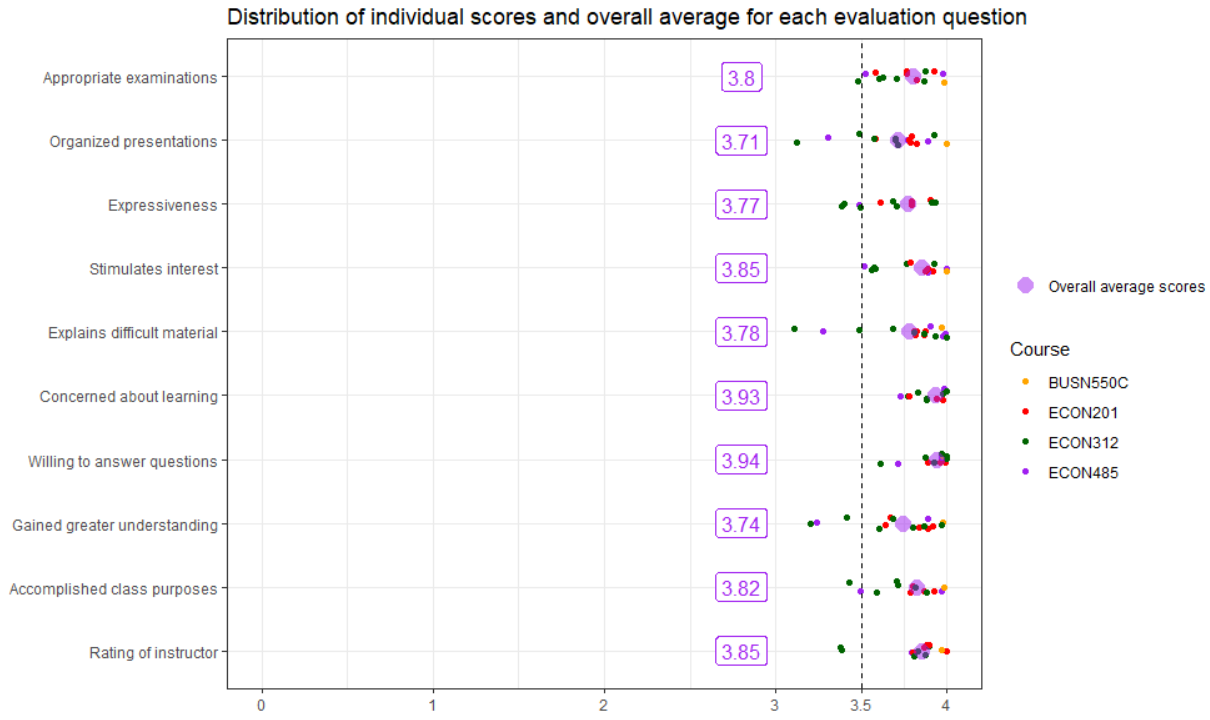

Figure 1: Distribution of scores for each evaluation question

the outbreak of the COVID-19 pandemic, which, not unlike many others, has had a strong negative impact on me, personally, as well as my family.

Even though this figure shows my high performance relative to the composite averages, it can be hard to read entirely due how the lines overlap. This is due to the fact that some scores are very close to each other and their corresponding points on the lines are indistinguishable. For this purpose, I also designed Figure 3, which better showcases the fact that my performance has been comparatively the highest for the most part. This chart shows how my performance *ranks* compared to the 3 other composites over time.

Again, the blue line is consistently on top, which means that my scores have ranked first for the most part since I started teaching at Tech. I lost first rank a few times prior to COVID, but I always bounced back to 1st rank immediately after. This illustrates the fact that I always carefully read the students comments and implement changes to the way I do things in order to better suit their needs. As a matter of fact, I made a few changes to my teaching methods this quarter (Fall 2021) and I expect my scores to get back to their historical levels after the dip they experienced since the start of the pandemic.

The table as well as the 3 figures show that, overall, my teaching evaluations have been excellent. There is; however, room for improvement and I keep exploring new ways to get better at what I do.

3 Personal statements

I fully adhere to the Mission of Louisiana Tech University, which is to educate and develop its students through quality teaching, research, creative activity, public service, and workforce/economic development[1].

[1]https://www.latech.edu/about/mission/

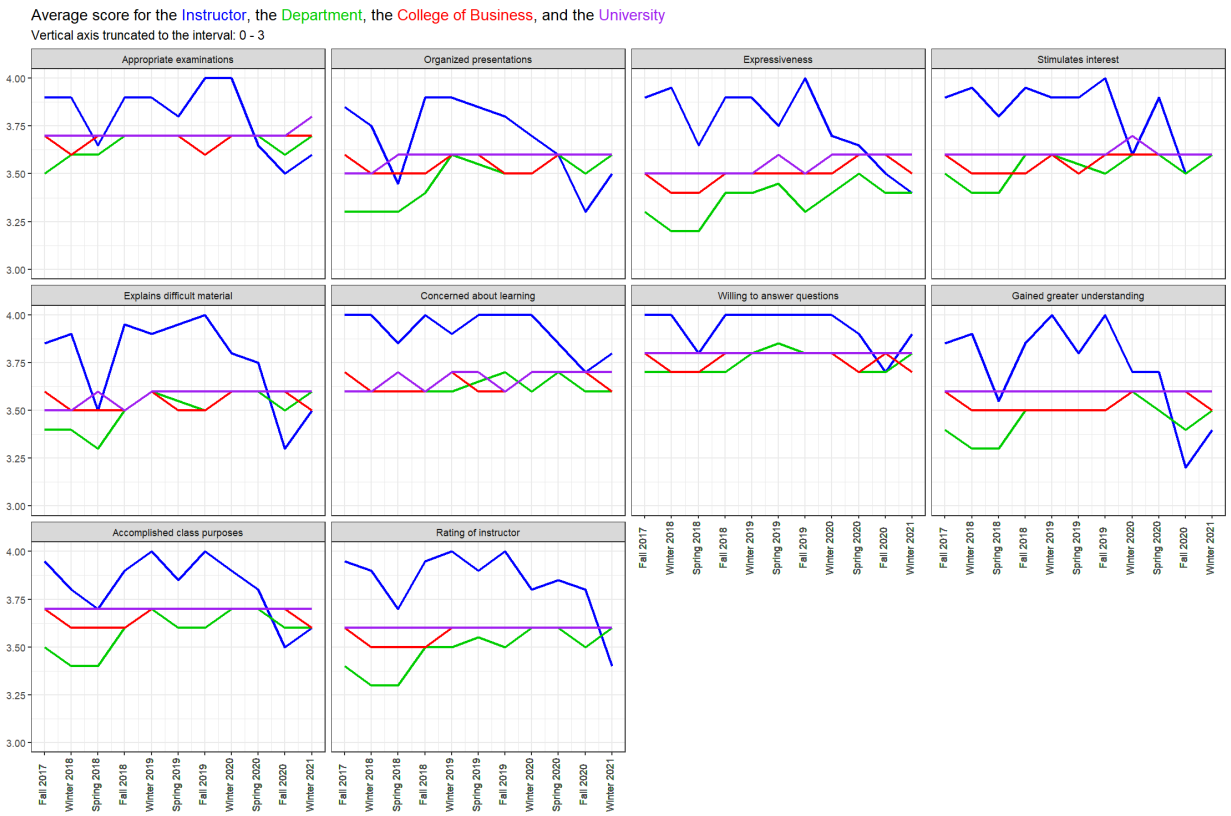

Figure 2: Comparative analysis of average scores

3.1 Teaching

*"**Give** a man a fish, and you feed him for a day. **Teach** a man to fish, and you feed him for a lifetime."* This old Chinese adage shows the impact of teaching and has always been one of my guiding principles as a teacher. Today's society is said to be in the *information age*, therefore, the best way to empower people is to give them the relevant *information*. What better and more effective way to achieve this, but to *educate* and *teach* them as stated in the University mission? The story told by Figure 2(i.e. which is that Tech instructors are excellent) is a testimony to the fact that the University is indeed committed to quality instruction.

3.2 Research

We live in an ever-evolving and highly *competitive* world with *new wants and needs*. Traditional methodologies are becoming *obsolete* in the face of *constantly changing requirements* in all fields. Consequently, remaining at the cutting edge has become more than ever vital in every discipline. As a result, the only way to stay relevant is true *commitment to research*. This emphasis of the University is a strong indication of its desire to produce highly qualified and adequately-equipped people who are ready to face contemporary challenges in their respective areas of activity. This is ineluctably one of the most important pillars of the University mission.

3.3 Service

I have personally always been inspired by the following quotes:

- *"Life's most persistent and urgent question is: What are you doing for others?"* (Rev. Martin Luther King)

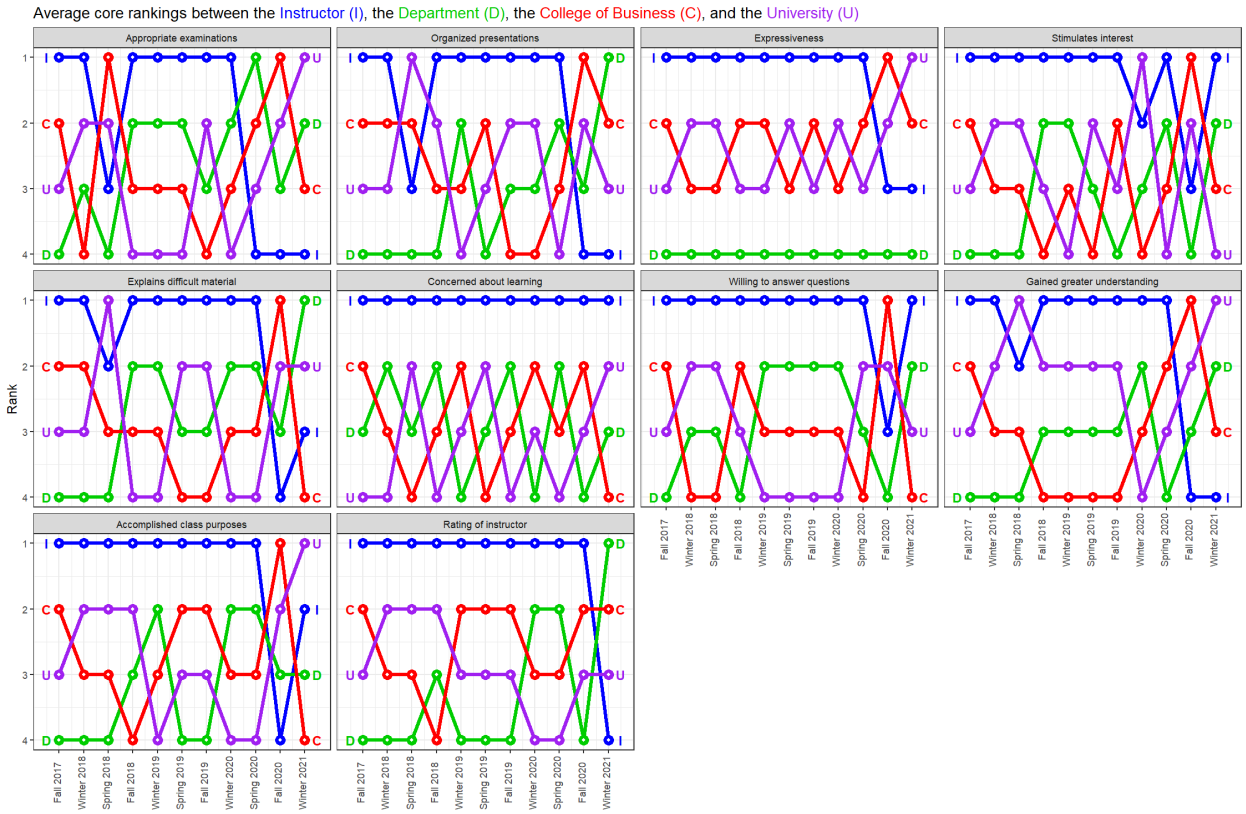

Figure 3: Comparative analysis of rankings

- *"The best way to find yourself is to lose yourself in the service of others."* (Mahatma Gandhi)

I fully adhere to their spirit and I hope that the last section of this document (Section 5) will adequately illustrate it. Popular culture has gradually shifted to the "self" over the years. In a world where the "selfie" is a source of fulfillment, where so-called "self-made" people are regarded as hero-in-es, and where the main narrative emphasizes personal success with little regard for the common good, I strongly believe that the University's focus on *service* is needed more than ever. Given that it is only a small percentage of the population that reaches high levels of success, this culture, I believe, has a negative effect on most people. They constantly "feel like failures" and always attempt to "keep up with the Joneses". Our University's emphasis on service acts as a cure for this psychological burden and redefines success in the hearts of students and faculty. Being rewarded for service is a practical illustration of the fact that true success is using our knowledge, skills, and possessions to make a difference in our immediate environment.

4 Funding and Research

4.1 Professorship

It is my greatest honor to be the current *D. Wayne Parker Endowed Professor*. The professorship was awarded to me at the beginning of this academic year (2020-2021).

4.2 Research

I currently have 2 peer-reviewed publications in SSCI (Social Sciences Citation Index) journals:

- Gueye, G.N., Kim, H. and Sorek, G., 2017. Pitfalls in Testing for Cointegration between Inequality and the Real Income. Economic Inquiry, 55(2), pp.941-950.
- Gueye, G.N., 2021. Pitfalls in the cointegration analysis of housing prices with the macroeconomy: Evidence from OECD countries. Journal of Housing Economics, 51, p.101748.

The first research article (Economic Inquiry) is an **elite publication** on the Department of Economics & Finance's journals list. The second publication (Journal of Housing Economics) is not on the list; however, the journal has an **impact factor** (1.594)[2] and an **H-index** (47)[3], which are higher than some of the A journals on the list. For example, the Journal of Economic Education is an A journal on our list and has an impact factor of 1.157[4] and an H-index of 46[5]. Moreover, I currently have 3 research papers under review and 3 others, which are on-going. My papers under review are:

- Long-Run Dynamics Between Trade Liberalization and Income Inequality in the European Union: The Case for Cross-Section Dependence (under review at Empirica)
- Teaching the Demand Curve from Simulated Consumer Preferences: A Web Application (under review with the International Review of Economic Education)
- Unenforced laws: the weakest link in addressing alcohol problems in Bhutan (under review with Biomedical Public Health)

5 Services to the Community

My **availability** for my students, my colleagues, and the community as a whole is probably the reason why some of my colleagues have **honored** me with their votes, which has led to my nomination for the Virgil Orr Award. Below is **a curated list** of some of my services to not only the Tech community, but also the local, and even the international community. I confirm that I have not earned **any financial gain** from any of the items listed below. My payment has been the pure joy, satisfaction, and fulfillment derived from **making the lives of others easier in relevant ways**. The **hundreds of hours** I spent in achieving what follows were fueled by the desire to **make a difference**:

- I created the **Louisiana Tech Data Science Seminar** in the Winter of the 2017-2018 academic year while I was still a **Visiting Assistant Professor** with **no guarantee that I would stay**. Data science is one the "hottest" skills on the job market today and I wanted to use my experience to **add value to the community**. The regular attendees of the seminar were **undergraduate students, graduate students, and even professors**. Some of our illustrious attendees were: __the Associate Dean of Undergraduate Studies: Dr. Rob Blackstock)), **the Associate Dean of Graduate Studies (at the time): Dr. Doug Amyx**, and **the current Chair of the Department of Management: Dr. Kirk Ring**. We were also regularly joined by students from **the College of Engineering**. As a matter of fact, one of our faithful attendees by the name of Jacob Johns, a recent Tech graduate in Mechanical Engineering, **started a data science consulting company with his friends** as soon as he graduated. They very frequently reach out to me for **guidance**. Unfortunately, we had to stop our weekly meetings because to the pandemic.
- I developed a web application to help **all economics instructors** teach the **theory of demand**, which is foundational in economic theory. This **free-to-use** application uses simulated data to **bring life to the theory** and it provides students with a **practical understanding** of the concept and its underlying dynamics. It is already being **used at Tech** in undergraduate and graduate courses that I don't teach. It has also been used in **Kazakhstan** at **the graduate level**. An accompanying journal article has been written and is currently under review at the International Review of Economic Education. The goal is to let more instructors know about it and let them use it in their classes. The application is **completely free-to-use** and can be found here: https://gueyenono.shinyapps.io/demand_consumer_surplus_app/

[2] https://www.journals.elsevier.com/journal-of-housing-economics
[3] https://www.scimagojr.com/journalsearch.php?q=13927&tip=sid&clean=0
[4] https://www.tandfonline.com/action/journalInformation?show=journalMetrics&journalCode=vece20
[5] https://www.scimagojr.com/journalsearch.php?q=24350&tip=sid&clean=0

- I developed a web application to help **all economics instructors** teach the **theory of production**. This theory is notorious for being one of the most **intricate** theories in microeconomics because of its heavy use of algebra and calculus. The application puts students in the shoes of the production manager of a company and uses simulated data to help them **understand the meaning and the use of key concepts**. It is already being **used at Tech in undergraduate and graduate courses (that I don't teach)**, and an accompanying journal article is currently being written in order to make it more known to economics instructors around the world. The application is **completely free-to-use** and is available here: https://gueyenono.shinyapps.io/ProductionTheory/
- I developed a web application to help **all Tech instructors** find out which of their students have attended College of Business events. Jessica George, the Executive Director of Student Services and Placement at the College of Business, releases a COB events master attendance list at the end of every quarter. Instructors who provide incentives for their students to attend these events used very time-consuming methods to search through these files, which can be **quite large** given the high attendance rate of COB events. Now, they can find out which of their students attended the events in **just a few clicks**. **The Dean of the College of Business, Dr. Chris Martin**, personally emailed me to say how pleased he was with the application. Now, the application is mentioned in every email sent out by Jessica George whenever she sends out the master attendance file. It is **completely free-to-use** and can be found here: https://gueyenono.shinyapps.io/attendance_tracker/
- I developed a web application to help **all students** know their **current grade**. Instructors often do not assign the correct weights to the various evaluation types on their Learning Management Systems (e.g. Moodle). As a result, the grades that students see online are **not accurate**. Using the application I developed, they can enter their test scores as well as the weights as stated on their syllabi, and the application will **calculate their current grade for them**. The application is by far my **most popular product** and has been used by **thousands of students**. It is **completely free-to-use** and can be found here: https://gueyenono.shinyapps.io/gradetools/
- Figures 1, 2, and 3 are the results of my wish to present my teaching evaluations to you in creative ways. The effort that went into producing these visualizations is significant. First, I had to extract the evaluations data from 17 evaluations reports, which was relatively difficult since the reports are released as PDF files, and not spreadsheets. I was eventually able to achieve this thanks to my skills in PDF data extraction and text wrangling. Then, I aggregated the data in a usable format before designing and producing the visualizations. While I worked on this, I could not help but think about how time-consuming it would be for fellow instructors to manually extract the data from the PDF files into a useful format. So, I developed a web application to help all **Tech instructors** extract the data from their evaluations reports. Now, they just need to upload their files to the application, then the application will do the work for them and enable them to download a file of all their combined evaluations data. As a bonus, the application will also make visualizations, which are similar to the figures in this document. This application will specifically help, among others:
  - future nominees of the Virgil Orr Award
  - tenure-track faculty preparing their tenure packet
  - Ph.D./doctoral students preparing their job application packet

The application has the potential to become more sophisticated; however, the available time I had between receiving the email about my nomination and the deadline for submitting the packet (May 4 - May 13) did not allow me to do more due to other University responsibilities. Nevertheless, I plan to work more on it over time and let **all Tech faculty** know about it. The application is **completely free-to-use** and can be found here: https://gueyenono.shinyapps.io/TechEvalsExtractor/