Ayush Kumar

akumar@patriots.uttyler.edu Website: https://ak9700.github.io

EDUCATION

2018 – present

B.S. Honors Economics and Mathematics

University of Texas-Tyler, USA

GPA: 3.73

WORK EXPERIENCE

2020 - present

Academic Support Department

University of Texas-Tyler, USA

Supplemental Instructor (Calculus II)

Patriot Academic Success Services Tutor (Ordinary Differential Equations and Calculus II)

Provided supplemental instruction for 70-80 students per semester, by providing peer assisted tutoring, study sessions, and exam reviews. Functioned as a tutor for 100-110 students by tutoring Ordinary Differential Equations and Calculus II, by hosting one-on-one tutoring services.

2020–Present

Patriot Talon

University of Texas-Tyler, USA

Opinion Editor

Columnist for the "Steady State" column.

2018 - 2020

Hibbs Institute for Business and Economic Research

University of Texas-Tyler, USA

Undergraduate Research Assistant

Prepared materials for reports, presentations and submission to peer-reviewed journal publications. Prepared literature for reports, presentation, and economic impact analysis.

Submitted

1. A Model of Pollution, Income, and Pollution Intensity (2020) with Luis Gautier

IN PREPARATION

- 1. "On Morita Equivalence of Inverse Hulls of Markov Shifts" with David Milan.
- 2. "An Equivalent Definition of Open Balls" under Scott LaLonde.

PUBLICATIONS

Institutional Newsletters

- I. M. Reyes-Loya, M. Young, and A. Kumar. "Health Status in the US with a focus on East Texas" In: *Hibbs Newsletter*(July 2019).
- 2. M. Reyes-Loya, M. Young, and A. Kumar. "How the Behaviors of Some East Texans May Affect Their Health". In: *Hibbs Newsletter*(Sept. 2019)
- 3. M. Reyes-Loya, M. Young, and A. Kumar. "Key Facts About East Texas Uninsured Population". In: *Hibbs Newsletter*(Nov. 2019)
- 4. M. Reyes-Loya, M. Young, and A. Kumar. "How Much Time do East Texans Spend Commuting?" In: *Hibbs Newsletter*(Feb. 2020)
- 5. M. Reyes-Loya, M. Young, and A. Kumar. "Smith Gregg Counties Lead Large Texas MSAs in Healthcare System Capacity Per-Capita". In: *Hibbs Newsletter*(Apr. 2020)
- 6. J. Howlett et al. "COVID-19 and East Texas Employment: The Economic Recovery Begins". In: *Hibbs Newsletter*(Aug. 2020)

Ayush Kumar Curriculum Vitæ

INSTITUTIONAL REPORTS

 M. Reyes-Loya, M. Young, and A. Kumar. "Demographic Profile of Longview, Nacogdoches, and Mount Pleasant in East Texas". In: Hibbs Report Number: 2019 – 06(Aug. 2019)

- M. Reyes-Loya, M. Young, and A. Kumar. "Economic Impact Analysis of Non-LocalAttendance to the 2019 NCAA Division III Softball Championship in Tyler (MSA)". in: Hibbs Report Number: 2019 – 07(Aug. 2019)
- 3. M. Reyes-Loya, M. Young, and A. Kumar. "Hibbs Institute Health Index: Examining Health Conditions in the Region". In: *Hibbs Report Number*: 2019 08(Aug. 2019).

Honors

2018-22

Presidential Fellowship Inducted Fellow University of Texas-Tyler

Pi Mu Epsilon

TECHNICAL SKILLS AND CERTIFICATIONS

TECHNICAL SKILLS

R, Stata, IMPLaN, REMI, Tableau, Qualtrics, LTEX, SQL, Python, and MATLAB(beginner).

CERTIFICATION

2020

Statistician with R Track

DATACAMP

NetCourse 471: Introduction to Panel Data Using Stata

STATA CORPORATION

PRESENTATIONS

2019

2020

Association for University Business and Economic Research Conference, Savannah, GA.

"Investigating the drivers of a Regional Economy: Tyler, Texas." with Reyes-Loya, M.

Lyceum University of Texas-Tyler, TX.

"Minimum Wage and Disemployment: Evidence from Las-Cruces."

Award: Third Best Oral Presentation.

2021 Mathfes

Mathfest - Mathematical Association of America, Online.

"On Morita Equivalence of Inverse Hulls of Markov Shifts."

Young M

Young Mathematicians Conference, Ohio State University, Online.

"On Morita Equivalence of Inverse Hulls of Markov Shifts."

UPCOMING PRESENTATIONS

AMS-PME, Joint Mathematical Meetings, Seattle WA.

"A Definition of Open Balls."

AMS, Joint Mathematical Meetings, Seattle WA.

"On Morita Equivalence of Inverse Hulls of Markov Shifts."

EXTRACURRICULAR ACTIVITIES

2020

2022

2022

National Parliamentary Debate Association 2^{nd} Position.

NPTE