# Ayush Kumar akumar@patriots.uttyler.edu

# **EDUCATION**

2018 - present

B.S. Honors Economics and Mathematics

University of Texas-Tyler, USA

GPA: 3.7

# 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

- 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

ı. 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, MS Office, Tableau, ŁTŁX, SQL (beginner), Python (beginner), and MATLAB (beginner).

#### CERTIFICATION

2020

Statistician with R Track

DATACAMP

NetCourse 471: Introduction to Panel Data Using Stata

STATA CORPORATION

# **PRESENTATIONS**

2019

2021

2021

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.

Mathfest - Mathematical Association of America, Online.

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

Young Mathematicians Conference, Ohio State University, Online.

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

#### EXTRACURRICULAR ACTIVITIES AND HONORS

2019

The International Forensics Association

WORLD CHAMPIONSHIP

 $5^{th}$  Position in the world Parliamentary Debate (Open Division).

Semi-Finalist Impromptu Speaking.

2020

National Parliamentary Debate Association  $2^{nd}$  Position.

NPTE