Stanford

ibrahim Halil Aslan

Postdoctoral Scholar, Hopkins Marine Station

📄 Curriculum Vitae available Online

Bio

BIO

My research focus is infectious disease modeling and optimal control theory. Besides, I am interested in machine learning algorithms and statistical modeling. In my research, I am using mathematical tools to understand the behavior of the diseases and manage the control strategies for the diseases. I've been involved in a couple of research projects for building new mathematical models for Leptospirosis infectious disease and I am currently working on schistosomiasis infectious disease to predict future projection of the disease propagation under climate change.

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Officer, Student chapter of Society for Industrial and Applied Mathematics (2017 - 2019)
- President, University of Tennessee Turkish Student Association (2016 - 2019)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, University of Tennessee Knoxville (2019)
- MS, University of Tennessee Knoxville , Mathematics with Concentration in Mathematical Ecology/Evolution (2016)
- MS, Gaziantep University , Applied Mathematics (2011)
- BSc, Mersin University , Mathematics (2009)

STANFORD ADVISORS

- Giulio De Leo, Postdoctoral Faculty Sponsor

COMMUNITY AND INTERNATIONAL WORK

- Integrated risk mapping and targeted snail control to support schistosomiasis elimination in Brazil and Cote d'Ivoire under future climate change
- Researcher

LINKS

- Linkedin: https://www.linkedin.com/in/ibrahimhalilaslan/

Research & Scholarship

RESEARCH INTERESTS

- Data Sciences

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Integrated risk mapping and targeted snail control to support schistosomiasis elimination in Brazil and Cote d'Ivoire under future climate change.

PROJECTS

- Leptospirosis Modeling - NIMBioS/University of Tennessee, Knoxville (August 25, 2015 - June 24, 2016)

Publications

PUBLICATIONS

- **Analyzing the effect of restrictions on the COVID-19 outbreak for some US states** *THEORETICAL ECOLOGY*
  Demir, M., Aslan, I. H., Lenhart, S.
  2023

- **Analyzing the effect of restrictions on the COVID-19 outbreak for some US states.** *Theoretical ecology*
  Demir, M., Aslan, I. H., Lenhart, S.
  2023; 16 (2): 117-129

- **The effect of changing COVID-19 restrictions on the transmission rate in a veterinary clinic.** *Infectious Disease Modelling*
  Spence, L., Anderson, D. E., Aslan, I. H., Demir, M., Okafor, C. C., Souza, M., Lenhart, S.
  2023; 8 (1): 294-308

- **Modeling COVID-19: Forecasting and analyzing the dynamics of the outbreaks in Hubei and Turkey** *MATHEMATICAL METHODS IN THE APPLIED SCIENCES*
  Aslan, I., Demir, M., Wise, M., Lenhart, S.
  2022

- **AN AGE STRUCTURE MODEL WITH IMPULSE ACTIONS FOR LEPTOSPIROSIS IN LIVESTOCK CATTLE** *JOURNAL OF BIOLOGICAL SYSTEMS*
  Aslan, I., Baca-Carrasco, D., Lenhart, S., Velasco-Hernandez, J. X.
  2021; 29 (01): 75-105