

JULIO ERNESTO NAVA TREJO

PERSONAL PROFILE

I'm an applied mathematician fascinated by the duality relationship between applications and theory.

AREAS OF INTEREST

- Probability theory & Stochastic processes
- Biological models
- Pattern recognition & Machine learning

WORK EXPERIENCE

Teaching assistant, Department of Mathematics, UNAM. 2019-1 - 2020-1

SUBJECTS:

For biologists:

- Mathematics for biological science I

For mathematicians:

- Stochastic processes I
- Statistics seminar: Statistical Machine Learning
- Modeling workshop I

ACADEMIC BACKGROUND

National Autonomous University of Mexico (UNAM)

CANDIDATE TO MASTER DEGREE IN MATHEMATICAL SCIENCES, (2020)

- Current grade point average: 10

BACHELOR OF SCIENCE IN APPLIED MATHEMATICS (2016-2020)

- Grade point average: 9.6

RESEARCH EXPERIENCE

The role of connectivity on COVID-19 preventive approaches

Preprint: <https://doi.org/10.1101/2021.03.11.21253348> Coauthors: V. Miró Pina, A. Tóbiás, E. Nzabarushimana, A. González-Casanova, I. González-Casanova.

Lookdown construction for a Moran Seed-bank model

Work in progress with María Clara Fittipaldi (mcfittipaldi@ciencias.unam.mx) and Adrián González Casanova Soberón (adriangcse@matem.unam.mx)

PROGRAMMING LANGUAGES AND TOOLS

- Python: TensorFlow
- R: H2O

LANGUAGES

- English Certificate IELTS B2
- Spanish Native

SCHOOLS AND CONGRESSES

- Participant: Primera Escuela AME: Ciencia de Datos, septiembre de 2019, UNAM, CDMX, México
- Participant: XVII Escuela de probabilidad y estadística, marzo de 2019, CIMAT, Guanajuato, México.
- Staff: 5º Congreso de Actuaría, enero de 2019, Facultad de Ciencias, UNAM, México.
- Participant: 2o Taller de nacional de biología y probabilidad, noviembre 2019, Centro de Ciencias Genómicas, UNAM, Cuernavaca, Morelos.
- Participant: MIT COVID-19 Challenge Hack4theFuture: Humanizing AI for Future 2020.
- Participant: VI Congreso Latinoamericano de Matemáticos CLAM 2021.
- Participant: Integrative Think Tank (ITT) on Environmental shock resilience, in México; data, models and policy 2021

CONTACT

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