Ignacio Mariano Sticco

Lic. in physics

Contact info

Phone:
+54 (9) 11-6045-0304

Email:
ignaciosticco@gmail.com

Nationality:
Argentina

Personal website:
https://ignaciosticco.github.io/

Languages

Spanish
English

Knowledge

**Physics,
Math,
Python (Pandas, Numpy,
Scipy), Matlab, C++, LAMMPS,
Linux, Git, Latex**

Skills

Research
Data analysis
Communication

Interests

Machine learning
Artificial Intelligence
Computer vision

About me

I have a degree (Licenciatura) in physics, and I'm currently a Ph.D. student at the University of Buenos Aires (Argentina). My field of research is pedestrian dynamics. My approach to the field is from a computational physics perspective. I use numerical models to study crowd evacuations in high-density and high-anxiety conditions. After finishing my Ph.D. I'm directing my career towards the application of Machine Learning to solve real-life problems. In particular, I would like to become an expert in computer vision to solve big challenges such as disease detection, climate change, and human safety.

Education

Licenciatura in physics, *"Facultad de Ciencias Exactas y Naturales" (University of Buenos Aires)*, 2010 -2016.

Peer-reviewed journal articles

Improving competitive evacuations with a vestibule structure designed from panel-like obstacles in the framework of the Social Force Model
IM Sticco, GA Frank, CO Dorso; Safety science; 2022

Microscopic dynamics of escaping groups through an exit and a corridor
EA Rozan, GA Frank, FE Cornes, IM Sticco, CO Dorso; arXiv; 2021

Social force model parameter testing and optimization using a high stress real-life situation
IM Sticco, GA Frank, CO Dorso; Physica A: Statistical Mechanics and its Applications; 2021

Effects of the body force on the pedestrian and the evacuation dynamics
IM Sticco, GA Frank, CO Dorso; Safety science; 2020

A re-examination of the role of friction in the original Social Force Model
IM Sticco, GA Frank, FE Cornes, CO Dorso; Safety science; 2020

Beyond the faster-is-slower effect
IM Sticco, FE Cornes, GA Frank, CO Dorso; Physical Review E; 2017

Room evacuation through two contiguous exits
IM Sticco, GA Frank, S Cerrotta, CO Dorso; Physica A: Statistical Mechanics and its Applications; 2017

Courses

7th Workshop on Collaborative Scientific Software Development, *ICTP Trieste (Italia),* 2019

Machine Learning, *Stanford University (Coursera),* 2018

Learning how to learn, University of California (Coursera), 2015

First Certificate in English, Cambridge, 2009

Teaching and industry

Teaching assistant in *UADE -* August 2021- Present

Data Scientist in *Futbol Sites Network* – January 2018 – July 2018

Teaching assistant in *UBA* – January 2017 – February 2018