# Nora Patricia Hernandez Lopez

## Research interests

AI education; STEAM education; Learning Sciences; Learning analytics

#### Education

	Education
2021 – Present	The University of Hong Kong – HKSAR Ph.D., Education Supervisor: Dr. Xiao Hu; Co-supervisors: Dr. Samuel K. W. Chu, Dr. Gary K. W. Wong
2018 - 2020	Tecnologico de Monterrey – Mexico
	M.Sc., Computer Science
	Supervisor: Dr. Jorge Adolfo Ramírez Uresti
	GPA: 97/100.
2018 - 2020	Universidad del Valle de Mexico – Mexico
	M.Ed., Innovation and Educational Technology
	GPA: 9.5/10.
2011 - 2016	Tecnologico de Monterrey – Mexico
	B.Eng., Mechatronics
	GPA: 92/100.
	Selected honours and scholarships
2022	ALiTE Fellows Programme for Doctoral Students 2022-23
2021	Hong Kong Ph.D. Fellowship 2021/22 (Research Grants Council, HKSAR)
2021	HKU Presidential Ph.D. Scholarship 2021/22 (The University of Hong Kong, HKSAR)
2018	National Post-graduate Scholarship (CONACyT, Mexico)
2018, 2011	Academic Excellence Scholarship (Tecnologico de Monterrey, Mexico)

## Research Outputs

# 2020 Hybrid Recommender System for a Context Aware Recommendation in the Film Domain

Master Thesis.

#### 2019 Razonamiento estadístico

Estrada Real, A. y Hernández López, N.P.

Razonamiento Computacional, 1st ed. [online] México: Francisco Cantú & Rocío Aldeco (Ed), pp.63-102. Available at: http://amexcomp.mx/files/Libro-CyR.pdf.

## A Context Hybrid Bayesian Model for Recommendations

Hernández López, N.P. y Ramírez Uresti, J.A.

Personal and Ubiquitous Computing..

# **Professional Training**

2023 Bayesian Statistics for Social and Health Scientists in R and Python – Online Institute for Statistical and Data Science

## 2022 Learning Analytics Summer Institute (LASI) – Canada, online

University of British Columbia

Awarded with Erik Duval Scholarship

## Conference Presentations

# 2022 IEEE International Conference on Teaching, Assessment and Learning for

**Engineering (TALE)** – Hong Kong

The Hong Kong Polytechnic University

Second Runner Up: TALE 2022 Interdisciplinary Postgraduate Student Forum

## **Forum for Social Experiments for AI in Education** – China

Graduate School of Education, Peking University

Presentation: Computing Education meets the Arts: Preliminary results from a systematic review

#### 2020 Congreso de Investigación y Desarrollo (CIDTEC) – Mexico

Tecnologico de Monterrey

Poster presentation: A Context Hybrid Bayesian Model for Movie Recommendations

# Other Conference Participation

# 2022 International Conference of the Learning Sciences (ICLS) – Japan, hybrid

Attendee

## 2021 International Society for Music Information Retrieval (ISMIR) Conference -

online

Volunteer

#### 2016 INCmty - Mexico

Participant: Bus Challenge (Innovation and entrepreneurship bootcamp)

## Professional experience

## 2016-2017, 2020 **Aerobot Planet (co-founder, project developer)** – Mexico

Start-up company dedicated to deliver STEAM educational programs for youth between 10 and 14 years old.

## 2016 **Ternium (Quality Specialist)** – Mexico

Revising requirements for ISO/TS:16949 certification. Monitoring complaints solutions and customer service satisfaction. Implementing a data analysis engine to deliver relevant product quality insights.

## Jul-Dec 2015 **Ternium (Production Intern)** – Mexico

Monitor and reduce fuel consumption in re-heat process pre-milling of steel wires. Lead operational teams for quality assurance and operational safety.

## **Technical Skills**

#### Programming languages

Proficient in: R, Matlab, Python

Familiar with: Javascript

#### **Software**

Weka, Advanced MS Office, Autodesk Inventor, Adobe CC (Premiere, InDesign), La TeX, Git

#### Languages

Spanish (native), English (fluent), German (basic)

## Continuous Education

2020 Improving Your Statistical Questions – Eindhoven University of Technology (Coursera)

Improving Your Statistical Inferences – Eindhoven University of Technology (Coursera)

Introduction to Relational Database and SQL – (Coursera)

Big Data Analytics: Opportunities, Challenges and the Future – Griffith University (Future Learn)

Learning and Memory: Understandings from Educational Neuroscience – Central Queensland University (Future Learn)

Big Data and Language - KAIST (Coursera)

The Science of Wellbeing – Yale University (Coursera)

Creative Writing: The Craft of Plot – Wesleyan University (Coursera)

COVID19 Data Analysis Using Python - (Coursera)

2019 Recommender Systems Specialisation – University of Minnesota (Coursera)

Probabilistic Graphical Models - Stanford University (Coursera)

- 2018 R programming Johns Hopkins University (Coursera)
- 2014 The Language of Hollywood: Storytelling, Sound, and Color Wesleyan University (Coursera)

## Other Interests

Probability & Statistics, Statistical reasoning, Cognitive Science, Linguistics