

# RESEARCH WORKSHOP



LATINX IN AI

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DECEMBER 7TH, 2020



NEURAL INFORMATION  
PROCESSING SYSTEMS

# WORKSHOP SPONSORS

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PLATINUM

**Google** Research

**FACEBOOK**

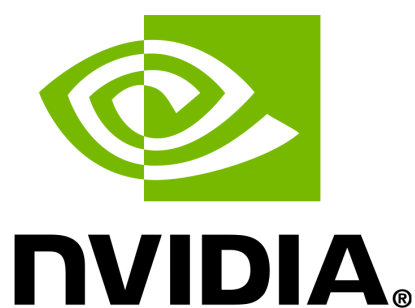


# WORKSHOP SPONSORS

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GOLD

 | science



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## SILVER



## BRONZE







# WORKSHOP SCHEDULE

December, 7th 2020

## MORNING

**7:00 AM** Check-in  
**8:15 AM** Opening Remarks  
**8:30 AM** Keynote  
**Oriol Vinyals**  
**9:00 AM** Keynote Q&A  
**9:10 AM** Oral Presentations  
**9:50 AM** Q&A Session  
**10:00 AM** Break  
**10:10 AM** Oral Presentations  
**10:50 AM** Q&A Session  
**11:00 AM** Break  
**11:10 AM** Keynote  
**Aline Villavicencio**  
**11:40 AM** Keynote Q&A  
**11:50 AM** Break

## AFTERNOON

**12:00 PM** Lunch &  
Sponsor Announcements  
**12:30 PM** Poster Session  
**2:30 PM** Keynote  
**Fernanda Viegas**  
**3:00 PM** Keynote Q&A  
**3:10 PM** Oral Presentations  
**3:50 PM** Q&A Session  
**4:00 PM** Break  
**4:10 PM** Keynote  
**Nayat Sanchez-Pi**  
**4:40 PM** Keynote Q&A  
**4:50 PM** Oral Presentations  
**5:20 PM** Q&A Session  
**5:30 PM** Mentoring Hour  
**6:30 PM** Closing Remarks  
**7:00 PM** Social Hour



# LATINX IN AI RESEARCH WORKSHOP



## ORAL PRESENTERS

Monday, December 7th, 9:10 am PST



### **JUAN LUIS GONZALEZ**

*KAIST-VICLab*

Forget About the LiDAR: Self-Supervised Depth Estimators with MED Probability Volumes



### **SALVA RÜHLING CACHAY**

*Technical University of Darmstadt*

Model Misspecification in Multiple Weak Supervision



### **GUSTAVO SUTTER P. CARVALHO**

*Universidade de São Paulo (ICMC-USP)*

An evaluation metric for generative models using hierarchical clustering



### **ARIEL RUIZ-GARCIA**

*SeeChange.ai*

Generative Adversarial Stacked Autoencoders



# LATINX IN AI RESEARCH WORKSHOP



## ORAL PRESENTERS

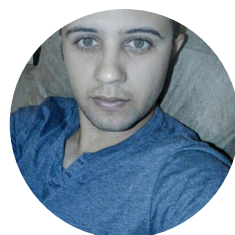
Monday, December 7th, 10:10 am PST



### **OCTAVIO ARRIAGA**

*University of Bremen*

Unsupervised Difficulty Estimation



### **GEFERSOM G LIMA**

*Unisinos*

Binary Segmentation of Seismic Facies Using Encoder-Decoder  
Neural Networks



### **NICOLAS ARAQUE**

*Universidad Metropolitana*

Study, Attend and Predict: Academic Performance Prediction using  
Transformers



### **MATIAS DANIEL MOLINA**

*National University of Córdoba*

Performance Variability in Zero-Shot Classification

# LATINX IN AI RESEARCH WORKSHOP



## ORAL PRESENTERS

*Monday, December 7th, 3:11 pm PST*



### **GIUSEPPE VIETRI**

*University of Minnesota*

Private Reinforcement Learning with PAC and Regret Guarantees  
vietri



### **DANIEL ALFREDO PALOMINO PAUCAR**

*Universidad Católica San Pablo*

Overcoming Transformer Fine-Tuning process to improve Twitter  
Sentiment Analysis for Spanish Dialects



### **MARÍA BELÉN GUARANDA**

*ESPOL*

Detecting Damaged Regions after Natural Disasters using Mobile  
Phone Data: The Case of Ecuador Guaranda



### **ANDRES CARVALLO**

*Pontificia Universidad Católica de Chile*

Neural language models for text classification in evidence-based  
medicine Carvallo

# LATINX IN AI RESEARCH WORKSHOP



## ORAL PRESENTERS

*Monday, December 7th, 4:51 pm PST*



### **IVÁN VENZOR**

*Universidad Autónoma de Nuevo León*

Severe Weather Prediction Using Lightning Data



### **MAURICIO GONZALEZ-SOTO**

*Instituto Nacional de Astrofisica Optica y Electronica (INAOE)*

Learning a causal structure: a Bayesian Random Graph approach



### **DANIEL E OCHOA**

*University of Colorado Boulder*

Robust Optimization over Networks Using Distributed Restarting of Accelerated Dynamics Ochoa

# LXAI POSTER PRESENTERS

**DUSTIN JAVIER  
CARRION**

Yachay Tech University

Analysis of factors that influence the performance of biometric systems based on EEG signals

**JORGE F CIPRIÁN-  
SÁNCHEZ**

Tecnológico de Monterrey

Deep Learning model for wildfire detection through the fusion of visible and infrared information

**CARMINA PÉREZ-  
GUERRERO**

Tecnológico de Monterrey

Semantic Segmentation of Jet Fire Temperature Zones using Deep Learning

**SANTIAGO MIRET**

Intel Labs

Safety Aware Reinforcement Learning (SARL)

**LUIS GONZÁLEZ**

Universidad Autónoma de Chihuahua

Inferring Aggressive Driving Behavior from Smartphone Data - Smartphone's sensors meet Inception

**EDUARDO  
MOJICA-NAVA**

PAAS UN - Universidad Nacional de Colombia

Robust Asynchronous and Network-Independent Cooperative Learning

# LXAI POSTER PRESENTERS

**JOHAN SAMIR  
OBANDO CERON**  
UAO

Revisiting Rainbow: Promoting more insightful and inclusive deep reinforcement learning research

**JAVIER ANDRÉS  
ORDUZ-DUCUARA**  
UNAM

Quantum Machine Learning concepts and applications

**PABLO D PINO**  
Pontificia Universidad  
Católica de Chile)

Inspecting state of the art performance and NLP metrics in image-based medical report generation

**ENRIQUE J  
ARRIAGA-VARELA**  
Stroly Inc.

Automatic Georeferencing of Map Images Using Unsupervised Learning and Graph Analysis

**EDUARDO ULISES  
MOYA**  
Gobierno de Jalisco

A Quaternion Monogenic Layer Resilient to Large Brightness Changes in Image Classification

**LAUREN M  
PFEIFER**

Automatic Detection and Classification of Tick-borne Skin Lesions using Deep Learning

MGV

# LXAI POSTER PRESENTERS

## **FELIPE MAIA POLO**

University of São Paulo &  
Advanced Institute for  
Artificial Intelligence

Covariate Shift Adaptation in High-  
Dimensional and Divergent Distributions

## **IVAN VLADIMIR MEZA RUIZ**

Instituto de  
Investigaciones en  
Matemáticas Aplicadas y  
en Sistemas, UNAM

Towards forensic speaker identification in  
Spanish using triplet loss

## **ARIEL RUIZ- GARCIA**

Seechange.ai

Self-Supervised Transformers for Activity  
Classification using Ambient Sensors

## **JAVIER DE LA ROSA**

UNED

Predicting metrical patterns in Spanish  
poetry with language models

## **ALBERT M OROZCO CAMACHO**

Mila - Québec AI  
Institute, McGill University

Graph Neural Networks Learn Twitter Bot  
Behaviour



# WORKSHOP ORGANIZERS

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## PROGRAM COMMITTEE CHAIRS

ARIEL RUIZ-GARCIA, SENIOR AI TECHNOLOGY  
ENGINEER, SECHANGE.AI

IVAN ARRAUT, SENIOR RESEARCHER, THE OPEN  
UNIVERSITY OF HONG KONG

JUAN M. BANDA, ASSISTANT PROFESSOR, GEORGIA  
STATE UNIVERSITY

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## MENTORSHIP & PRESENTATION CHAIRS

PEDRO MAGALHÃES BRAGA, PHD CANDIDATE,  
UNIVERSIDADE FEDERAL DE PERNAMBUCO

KARLA CABALLERO, SENIOR AD SCIENTIST,  
PANDORA|SIRIUS XM

SERGIO HERNAN GARRIDO MEJIA, PHD CANDIDATE,  
TECHNICAL UNIVERSITY OF DENMARK|AMAZON

EDUARDO ULISES MOYA-SÁNCHEZ, ARTIFICIAL  
INTELLIGENCE DIRECTOR, GOBIERNO DEL ESTADO DE  
JALISCO, MÉXICO

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# ORGANIZERS

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VINICIUS FERNANDES CARIDÁ, MANAGER OF DIGITAL CUSTOMER SERVICE PLATFORMS, DATA AND AI, ITAÚ-UNIBANCO & GDE

## **PUBLIC RELATIONS & WEBSITE CHAIRS**

GISSELLA BEJARANO, PHD CANDIDATE IN COMPUTER SCIENCE, CO-FOUNDER IAPUCP, BINGHAMTON UNIVERSITY

JOSUÉ ORTEGA CARO, PHD CANDIDATE IN QUANTITATIVE AND COMPUTATIONAL BIOSCIENCES, BAYLOR COLLEGE OF MEDICINE

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## **SPONSOR & FINANCE CHAIRS**

IGNACIO LOPEZ-FRANCOS, RESEARCH ENGINEER, NASA AMES RESEARCH CENTER

FABIAN LATORRE, PHD CANDIDATE, ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE

## **VOLUNTEERS CHAIR**

CARLOS MIRANDA, RESEARCH ENGINEER, BUAWEI

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