# Albert M. Orozco Camacho

I have a broad spectrum of interests in AI: from the theoretical foundations of deep learning to applications regarding NLP, chatbots, and social networks. My current goals are directed towards enhancing how humans and machines communicate and understand themselves, as well as providing elegant models for such tasks.

#### Personal Details

Website https://alorozco53.github.io/ GitHub page https://github.com/alorozco53

Linkedin page https://www.linkedin.com/in/alorozco53/

#### Areas of Interest

- Computer Science
- Artificial Intelligence
- Machine Learning

#### Education

- 2012-2017 **Bachelor in Science Degree**, Facultad de Ciencias, Universidad Nacional Autónoma de México (UNAM), Mexico City, GPA 8.82 / 10 .

  Computer Science
  - 2015 Attended the 2015 Jelinek Summer School on Human Language Technologies, Summer school, It was a 2-week introductory summer school on cutting-edge topics about speech recognition, machine learning, and natural language processing, It was held at the University of Washington, Seattle.

Received a scholarship from The North American Chapter of the Association for Computational Linguistics (NAACL) to attend the summer school.

# Theses (Final Projects)

BSc. Automatic Generation of Internet Memes using a Deep Neural Network, Supervised by Dr Ivan V. Meza.

Faculty of Sciences, UNAM. pp. 111.

#### **Publications**

2016 LIPN-IIMAS at SemEval-2016 Task 1: Random Forest Regression Experiments on Align-and-Differentiate and Word Embeddings penalizing strategies.

Lightgow, O. , Meza, I. , Orozco, A. , Garcia-Flores, J. y Buscaldi, D. Proceedings of the 10th International Workshop on Semantic Evaluation (SemEval-2016) pp. 726-731.

2014 The Golem Team, RoboCup@Home 2014, Technical Report.

Pineda, L. , Rascon, C. , Fuentes, G. , Estrada, V. , Rodriguez, A. , Meza, I. , Ortega, H. , Reyes, M. , Peña, M. , Duran, J. , Campos, E. , Chimal, S. y Orozco, A. DCC, IIMAS, UNAM pp. 8.

# Workshops

- 2018 Poster to present: "Challenges in Automatic Meme Generation Using Deep Neural Networks", Conference presentation, The poster is related to what I've been doing to my bachelor's thesis project lately, It will be presented at LatinX in Al workshop, held at NIPS in Montréal, Canada.
- 2018 Poster to present: "Challenges in Automatic Meme Generation Using Deep Neural Networks", Conference presentation, The same poster as for LatinX in Al 2018 workshop, It will be part of the third Self-Organizing Conference on Machine Learning (SOCML), held at the Google offices in Toronto, Canada; it is organized by Ian Goodfellow.
- 2017 **Poster presented: "Deep Automatic Internet Meme Caption Generation"**, *Conference presentation*, I presented a poster at the second SOCML event, held at Sunnyvale, USA, The poster can be visualized here.
- 2017 Presented a talk titled "Towards Automatic Meme Generation", Outreach talk, I spoke about deep learning applications to NLP, from a linguistic perspective, CoLiCo stands for "Computational Linguistics Colloquium" and was organized by UNAM Linguistic Engineering Group Speaker at CoLiCo held at UNAM Facultad de Filosofía y Letras.

  The slides are available in https://alorozco53.github.io/talks/onto\_memes.html

### **Talks**

- 2017 Presented a talk titled "Towards Automatic Meme Caption Generation", Outreach talk, I spoke about my undergraduate thesis project and the lessons I learned during the coding part, Invited speaker at UNAM Google Developer Group's meetup and IPN ESCOM. The slides are available in https://alorozco53.github.io/talks/lessons.html
- 2017 Presented a talk titled "Implementing Eyes on your Chatbot", Outreach talk, Invited speaker at the "Bots LATAM" community, whose goal is to gather the most enthusiastic people in AI and Chatbots together in Mexico City.

  The slides are available in https://alorozco53.github.io/talks/eyes\_on\_bot.html

# Internships and Professional Experience

- 2017- Data Scientist at Mariachi IO, Paid Job, I joined Mariachi IO to help out in the solution of several tasks that require NLP, machine learning, and image processing, I am currently building a computer vision application using classic OpenCV-based algorithms and state-of-the art deep learning tools.
- 2017- Data Science Consultant at Fractal Abogados, Paid Job, Fractal Abogados is a startup whose purpose is to provide feasible IT (and AI) solutions into today's Mexican (and Latin American) law system, I work as an AI consultant in Fractal's signature project: a legal chatbot. Max is a Facebook Messenger based virtual assistant, powered by IBM Watson that automates the most common legal advices in Mexico.
- 2016- Teacher assistant the UNAM's Facultad de Ciencias, Paid Job, Taught Machine Learning and Pattern Recognition and Automata and Formal Languages during 2017. Taught the Programming Languages during the 2016 Spring Semester. Taught Discrete Structures Lab and Computational Logic during the 2016 Fall Semester. All courses are offered for the undergraduate curriculum, I will be teaching Computational Logic again this Spring 2018 semester.

- 2013-2015 **Student / researcher at UNAM's** *Grupo Golem*, *Extra-curricular activity*, Grupo Golem is a research group at IIMAS (Instituto de Investigaciones en Matemáticas Aplicadas y en Sistemas) whose main goal is to model the cognitive interaction between a humans and computer; all the research is unified in a service robot that competes internationally in the RoboCup@Home competition; the group's website is this one, Grupo Golem's leader is Dr Luis A. Pineda.
- 2012-2013 **Student / researcher at UNAM's IIMAS's Computer Science Department**, *Extracurricular activity*, I work alongside Dr Ivan V. Meza with speech recognizers, and replicated an experiment in which a robot learns from a human teacher how to transform babblings to simple English words.

## Other Activites

2017 Attended a NLP hackathon (*Gilkatón*) organized by UNAM's Grupo de Ingeniería Lingüística, *Hackathon*, Held in Mexico City at the Engineering Tower, UNAM, Alongside two linguists, we created a program to extract relevant information from a corpus of legal documents.

The code developed can be found here: https://github.com/alorozco53/Gilkaton.

- 2017 Attended an Al-Chatbot Hackathon organized by Synx and Recime, Hackathon, Held in Tlaquepaque, Jalisco, Mexico at ITESO.
  Alongside three friends, I helped developing a NLP module for a chatbot that tracks the user's food quality and exercising activites.
- 2017 **Volunteer in Technovation Challenge**, *Volunteering*, This event's focus is to encourage programming and entrepreneurship in Secondary School girls. During one of the regional knockout events, I helped out with logistic issues; it was held during May at Mexico City.
- 2016 Participated in the second annual "Jakatón" (computational linguistics hackathon), *Hackathon*, Held in Cholula, Puebla, Mexico.
- 2015 **Participated in Mexico's first computational linguistics hackathon**, *Hackathon*, I teamed up with a friend of mine to be finalists and obtained an honor's award.

# Languages

Spanish Mothertongue

English Bilingual proficiency

French Full professional proficiency

Completely fluent (IELTS)
Fluency mostly written (DELF B1)

#### Software

#### Programming Languages

- Python- C- C++- Prolog

### Additional Software

Tensorflow
SciPy
Pandas
PyTorch
Scikit-Learn
NLTK
OpenCV