

# ALBERTO GAONA

Coahuila, México

albertoo\_3c@hotmail.com

+52 844-278-3346

GitHub

LinkedIn

Portfolio

I am an engineer graduate offering one year of software engineering experience and one year in programming artificial neural networks, mostly used for computer vision tasks. Seeking to apply cutting-edge deep learning papers into a computer vision engineer position.

## SKILLS

**Proficient:** Python, C++, PyTorch, OpenCV, Matplotlib, Numpy, Git.

**Moderate:** TensorFlow, Keras, Java, C#, SQL, Pandas, AWS-EC2 instances, Linux.

## PROJECTS

### Automatic Hair Segmentation

[Source code](#) - 10/2018

- Achieved an IoU score of 0.86 and a pixel accuracy of 0.96 in a hair segmentation task by implementing a U-Net deep learning architecture using Keras.
- Improved the hair segmentation exactness by post-processing the model prediction output with a fully connected CRF and an image matting algorithm using Python.

### Dermatologist AI

[Source code](#) - 10/2018

- Developed a deep learning model that distinguish malignant melanoma from two benign skin lesions, nevus, and keratosis, with 79% confidence by adapting a pre-trained Inception v3 model using PyTorch.

### Real-Time Facial Landmarks Recognizer

[Source code](#) - 01/2018

- Built a convolutional neural network using Keras that identifies the location of 15 facial key-points with just 0.001 loss.
- Combined the OpenCV framework with the previous CNN model to create a recognition system that takes in an image or live stream containing faces and successfully determines the location of each face and their 15 facial key-points.
- Used the 15 facial key-points to add a sunglass filter to faces in real-time automatically.

## EDUCATION

Udacity

On line

**Deep Reinforcement Learning**

12/2018 - Present

**Artificial Intelligence and Specializations Nanodegree**

09/2017 - 03/2018

**Deep Learning Nanodegree Foundation**

03/2017 - 08/2017

Digital Invaders

Saltillo, Coahuila

**Innovation and Technological Creativity**

08/2016 - 12/2016

Autonomous University of Coahuila

Arteaga, Coahuila

**Computer Systems Engineer Bachelor's Degree**

08/2012 - 06/2017

## PROFESSIONAL EXPERIENCE

Autonomous University of Coahuila

Saltillo, Coahuila

**Software Engineer Intern**

03/2017 - 07/2017

- Streamline more than 57% the time it takes for each of the 32,000+ university's students to perform administrative procedures by coding a multi-platform mobile application prototype that allows to do them wherever they are.

01/2015 - 06/2015

- Used the available documentation to re-engineering and upgrade the intranet for the university's alumni program.
- Reduced approximately 60% of the registration process to the alumni program by developing an Android app that streamlines the complementary administrative procedures benefiting 43 higher education institutions.