

## EDUCATION

### COMPUTER SYSTEMS ENGINEERING, B.S.

SUPERIOR SCHOOL OF COMPUTER SCIENCES  
ESCOM - IPN  
( JAN 2017 – DEC 2021 )  
**GPA 92 OUT OF 100 (3.70)**

#### SCHOOLAR INTERNSHIP

### INFORMATIC ENGINEERING, B.S.

SUPERIOR TECHNICAL SCHOOL OF  
INFORMATIC ENGINEERS  
POLYTECHNIC UNIVERSITY OF MADRID  
(FROM JANUARY TO JULY OF 2020 - SPAIN )

#### PROGRAMMER, TECHNICAL TRACK

CENTER OF SCIENTIFIC AND TECHNOLOGICAL  
STUDIES #9 - IPN

#### LICENSE NUMBER 10949359

( AUG 2013 – JUNE 2016 )

#### GPA 87 OUT OF 100 (3.50)

- ✓ 2<sup>ND</sup> PLACE ON THE PHYSICS  
METROPOLITAN OLYMPIAD FROM 2015
- ✓ 2<sup>ND</sup> PLACE ON THE MATHEMATICS  
MEXICAN OLYMPIAD FROM 2014

## PROGRAMMING LANGUAGES

|            |                         |
|------------|-------------------------|
| JAVA       | 6 YEARS                 |
| JAVASCRIPT | 6 YEARS MAINLY FRONTEND |
| C          | 4 YEARS                 |
| PHP        | 1 YEAR                  |
| PYTHON     | 1 YEAR                  |

## TECHNOLOGIES

HTML, XML, CSS, JSON, JQUERY, AJAX,  
APACHE TOMCAT, WAMP, LAMP,  
WEKA WORKKBENCH, ANDROID SDK,  
MYSQL AND GIT.

## AREAS OF EXPERTISE

WEB DEVELOPMENT  
MOBILE DEVELOPMENT  
HARDWARE DEVELOPMENT  
SOFTWARE ENGINEERING  
DATA MINING / MACHINE LEARNING

## LANGUAGES

SPANISH  
ENGLISH

# EMANUEL BARRERA ESTRELLA

AGE:

22

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MEXICAN

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I'M A SOFTWARE ENGINEER WITH CREATIVE APPROACH, HARD WORKING AND RESULTS-ORIENTED. SOUND EXPERIENCE ON COMPETITIVE PROGRAMMING, SOFTWARE DEVELOPMENT AND HARDWARE DEVELOPMENT. GAINED AND LEARNT FROM MANY PERSONAL AND SCHOLAR PROJECTS. WITH COMPUTER SCIENCE AS A MAJOR.

I WANT TO BRING TO THE ORGANIZATIONS MY SKILLS, MY VISION AND MY COMMITMENT ON ACTIVITIES THAT HELP THE COMPANY SUCCEED.

DURING MY SCHOOLAR INTERNSHIP I COMPLETED SUCCESSFULLY THE SEMESTER DESPITE SWITCHING INTO THE VIRTUAL EDUCATION IMMEDIATLY AND WORKED EFFICIENTLY IN TEAM WITH SOME LOCAL PARTNERS FROM THE SCHOOL GETTING MY SOCIAL ABILITIES IMPROVED. THUS I CONSIDER THAT I AM GREAT TEAM MEMBER AND AT THE SAME TIME I AM SELF AND QUICK LEARNER, HAPPY TO WORK ON NEW AND UNKNOWN CHALLENGES UNTIL THEY GET SOLVED.

I'M IN LOVE WITH ARTS. IN MY SPARE TIME I HAVE CREATED A LOT OF PICTURES.

## MAJOR PROJECTS

### HEATMAP

[github.com/emanuel0918/Heatmap](https://github.com/emanuel0918/Heatmap)

WEB APPLICATION THAT AWARES THE COMMUNITY FROM THE CRIME IN THE CITIES USING A MAP THAT MARKS THE DANGEROUS ZONES.

- FRONTEND: HTML, CSS, BOOTSTRAP, JAVASCRIPT, GoogleMaps API AND CHART.js.
- BACKEND: JAVA, JAVA MAIL, GLASSFISH WEB SERVER AND MYSQL SERVER.

### GesEVENTOS

[github.com/emanuel0918/GesEventos](https://github.com/emanuel0918/GesEventos)

WEB APPLICATION TO MANAGE EVENTS AND TO GIVE SERVICE FOR THE EVENT MANAGERS AND GUESTS.

- FRONTEND: HTML, CSS, BOOTSTRAP, ADMIN LTE, JAVASCRIPT, JQUERY AND AJAX.
- BACKEND: PHP, APACHE TOMCAT, WAMP, LAMP, MYSQL, MPDF, PHPMAILER AND COMPOSER VIRTUAL ENVIRONMENT.

### APP NEWSPAPER

[github.com/emanuel0918/AppNewspaper](https://github.com/emanuel0918/AppNewspaper)

MOBILE APPLICATION TO MANAGE ARTICLES.

- FRONTEND: XML, NAVIGATION DRAWER AND MATERIAL DESIGN.
- BACKEND: JAVA, ANDROID SDK, REST API ENDPOINT, JSON AND SQLITE.

### ZEROCOPYMQ

[github.com/emanuel0918/zerocopyMQ](https://github.com/emanuel0918/zerocopyMQ)

APPLICATION WHICH COMMUNICATION INFRASTRUCTURE REQUIRES A QUEUE FUNCTIONALITY TO MANAGE THE MESSAGES IN AN INDIVIDUAL PROCESS CALLED BROKER AND NEITHER THE CLIENTS NOR THE SERVER DON'T STORE COPIES TO IMPROVE THE EFFICIENCY. DEVELOPED WITH C AND USING TCP SOCKETS TO ENSURE THE TRANSMISION.