

# Erick Garcia Flores

## SOFTWARE DEVELOPMENT ENGINEER

A passionate software developer with 3+ years of experience, I hope to work with a company that aligns with my values and interests as well as have a challenging and rewarding programming position. My main interests are UX (User design), Web Development, writing high quality easy to maintain code. My strongest asset by far is that I am an agile learner. If you want to learn more about the rest of my projects and my hobbies visit my website!



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## WORK EXPERIENCE

### Prime Air Engineer Amazon Corporation

08/2020 - Present Seattle, WA  
Changing the lives of customers by building a package delivering infrastructure on the air through drones.

#### Role

- Worked on software validators to get Federal Aviation Administration approval, involving functional requirement validation, physics of the drone, etc.
- Developed from start to finish the infrastructure for our services involving (CDK, pipelines, integration testing, EC2 Services, metrics, alarms, etc)

Contact : Rene Mader - rpmader@amazon.com

### Full-stack Angular Developer Applied Materials

06/2019 - Present Phoenix, AZ  
Worked with a remote team in the Semiconductor industry on a ETL and data analysis tool. Technologies used are Angular, Java, and virtualization.

#### Achievements/Tasks

- Migrated our data analysis legacy tool to Angular 8 employing latest industry standards which highly improved the quality of the code base
- Created infrastructure for unit testing and code review and enforced them on the front-end team through positive reinforcement and mentorship

Contact : Alex Pai - alex\_pai@amat.com

### Service Information Developer II DXC Technology

03/2018 - 05/2019 El Paso, TX  
Develop, maintain and test healthcare portals (MMIS Applications). Understand the business and technical aspect of the healthcare industry.

#### Achievements/Tasks

- Fixed exploits and optimized most of healthcare portals security in the US
- Trained the team on the most current industry C# features

Contact : Oswaldo Perez - oswaldo.perez@dxc.com

## EDUCATION

### Master of Science – Software Engineering The University of Texas at El Paso

2017 - 2018 3.44  
Cyber secure systems specialization

- The practicum project consisted of a plugin architecture add on for IDA a disassembler and debugger, that enhanced the functionality and it is currently used by cyber security development teams in Fort Bliss

### Bachelor of Science – Computer Science The University of Texas at El Paso

2014 - 2016 3.33  
Minor

- Mathematics

## TECHNICAL SKILLS

### Programming Languages & Technologies

Java, C#, PHP, Python, Typescript, MySQL, SPARQL, Oracle, MongoDB, OWL (Ontology), AWS (CDK), React, Angular, Redux

### Methodologies

SOLID (Clean code), Agile Development & SCRUM, User-first design, Test-driven development

### Tools & Environments

Visual Studio, IntelliJ, Command line, Hyper-V and VMWare, Docker & Kubernetes, GIT & TFS, Vim > Emacs

### Patterns

MVC, MVVM, Singleton, Factory, Redux

## LANGUAGES

English	●	●	●	●	●
Spanish	●	●	●	●	●
日本語 Japanese	●	●	●	●	●

## WORK EXPERIENCE

### Product Platform V&V Intern

#### Intel Corporation

2017 - 2018

Hillsboro, OR

Verification and validation on processors with the following technologies: WinForms UX Design, C# WCF protocols, unit testing and mock testing.

##### Achievements/Tasks

- Implement a continuous integration system supporting the team's host and client structure using virtualization
- Develop a bootstrap installer to deploy the V&V tool to developers and to the engineers in the fabrics

Contact : Tristan Hanson - [tristan.hanson@intel.com](mailto:tristan.hanson@intel.com)

### Graduate Research Assistant

#### The University of Texas at El Paso

01/2014 - 03/2018

El Paso, TX

Performing research in the fields of Semantic Web, Data Mining, and Ontologies.

##### Achievements/Tasks

- Developed the full DBCMS infrastructure, back end, and front end of the group Website using MVC architecture
- Contributor in an automatic creation/extraction of expressive ontologies from (normalized) relational databases

Contact : Doctor Natalia Villanueva - [nvillanuevarosales@utep.edu](mailto:nvillanuevarosales@utep.edu)

### High Parallel Computing Research Intern

#### Stanford University

05/2015 - 08/2015

Stanford, CA

Computer vision and parallel computing research

##### Achievements/Tasks

- Developed a methodology of embedding a real time computer vision payload on a Solo 3DR smart drone

Contact : Doctor Patric Hanrahan

### Tutor/Mentor for Students with Disabilities

#### El Paso Community College

2012 - 2014

El Paso, Texas

Working in private sessions with students with disabilities, enabling them to get the attention and support they need to obtain their degree additionally this includes acting as their mentor for the semester.

## PUBLICATIONS

Research poster

### Data Integration for Digital GeoTimescale Mapping

Erick Garcia

Dr. Natalia Villanueva

2016

Cyber-ShARE Center of Excellence

Research Paper

### Semantic-annotating of Research Lab Activities for Data Sharing

Erick Garcia

Dr. Natalia Villanueva

2015

Cyber-ShARE Center of Excellence

Research Poster

### Semantic-based data integration and exchange for a research group

Erick Garcia

Dr. Natalia Villanueva

2015

Cyber-ShARE Center of Excellence

February 23, 2022

## PERSONAL PROJECTS

### Dotfiles

- These are my dotfiles to configure my linux development cli environment, using i3 a tiling window manager, Windows WSL integration, last but not least a carefully crafted Vim & Emacs configuration

### Golang Client/Server Chatroom

- This is a sample multi-client/server done in Golang. Has simple user logins and username validation.

### JSON recursive Tcp-proxy

- A Python TCP protocol demo in which the client sends the server a JSON encoded graph. What is interesting is that this JSON is created recursively and it explains the differences when you take in account passing the objects by reference vs not taking in account any memory references at all.

### TCP stammering proxy demo

- TCP file transfer protocol demo which features a client-server architecture and demonstrates TCP reliability for transferring packets even if there is an unreliable (stammering) proxy.

### Battleship Haskell

- Classic battleship game done in the functional language Haskell

### My Static Website and Blog

- My personal website [erick-garcia.com](http://erick-garcia.com) and blog notes.[erick-garcia.com](http://erick-garcia.com) hosted on a Digital Ocean droplet is statically generated using Jekyll and my blog is rendered using Jekyll-org since I prefer Emacs' org-mode over markdown.

## HONOR AWARDS

### ParkHub challenge winner (2019)

HackDFW

- Time Map is a traffic/parking solution that uses the past Uber movement dataset, crowd-sourced real-time information, and parses information from future events using natural language processing.

### 1st place winner (2017)

RESET Hackathon

- Industry 4.0 and the Internet of Things is the main topic of this hackathon, projects must be developed based on technologies of Mobile Applications, Sensors, Bluetooth, AR, VR, etc. Won 1st place with a cyclic inventory optimization app using computer vision

### Fellowship Awardee (2016)

GEM

- GEM is a network of leading corporations, government laboratories, top universities, and top research institutions that enables qualified students from underrepresented communities to pursue graduate education in applied science and engineering. Fully paid the institution fees for the Master's Degree in Software Engineering.

### Valedictorian award for the academic generation (2012 - 2014)

Instituto Mexico highschool

- Graduated with honors and top of the 2014 generation

## VOLUNTEER EXPERIENCE

### Contributor in low resource home construction

#### Chopeke Collective

2015

Ciudad Juarez, Chihuahua

Chopeke Collective a project for building low resource thermic homes for needed Tarahumara homeless families in Ciudad Juarez, Mexico; under the supervision of Architect Omar Rios.

## CONFERENCES & COURSES

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### GEM Annual Conference Presenter (2017)

*The national GEM consortium*

- Represented Intel Corporation in the conference and was sponsored to attend the GEM annual conference at NYC

### HEENAC conference presenter at Anaheim, CA (2016)

*Hispanic Engineer National Achievement Awards Conference*

- Presented the paper Data Integration for Digital Geofield Mapping which was developed in my time as a graduate research assistant

### CAHSI conference presenter at Puerto Rico (2014)

*Computing Alliance of Hispanic-Serving Institutions*

- Presented the paper Semantic-annotating of Research Lab Activities for Data Sharing which was developed in my time as an undergraduate research assistant at UTEP