

Erick Ortiz

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eortiz.net

Education

California State University, Long Beach

Master of Science, Computer Science

August 2017 – December 2018

GPA – **3.7**

California State University, Bakersfield

Undergraduate Coursework, Computer Science

August 2015 – June 2017

GPA – **3.5**

California State University, Fullerton

Bachelor of Arts, History

August 2008 – May 2013

GPA – **3.3**

Projects

For a more detailed description of my projects, or to check out the source code, please visit (eortiz.net/projects.html).

Geometric Meltdown

January 2017 – Present

- Multiplayer Video Game
- Portable Game Engine
- Sound OO Design
- *Best Video Game (2017), CSUB – Department of Computer Science*
- State Design Pattern
- Command Design Pattern
- Iterator Design Pattern
- Computer Graphics
- Linux/Windows
- Multi-threaded

Portable Search Engine

August 2018 – December 2018

- Boolean Query Parser
- Ranked Retrieval
- Disk Positional Index
- Proximity Query
- Variable Byte Encoding
- Rocchio Classification
- Naive Bayes
- Adaptable via plugins
- Sound OO Design

Relevant Experience

Backend Software Developer

Crown Sterling

February 2019 – Present

- I work closely with an interdisciplinary team of software engineers, mathematicians, and physicists.
- I help to develop and design a new post-quantum cryptographic system.
- I architect the object-oriented design of the new system.
- I abstract modules in our system and impose appropriate design patterns.
- I develop and maintain the documentation for the new system.
- I interview stakeholders to extract functional and non-functional requirements.
- I work with encoding, compression, serialization, multithreading paradigms, and optimization algorithms.
- I conduct research to implement cutting edge technologies.

Software Developer Internship

International Fleet Management

June 2018 – December 2018

- I developed a fleet management system prototype that detected the damage to specific vehicles.
- The code base was developed in C++ and OpenCV.

Head Tutor

Kegley Center for Student Success

January 2016 – June 2017

- I tutored Introduction to Programming, Data Structures, Object Oriented Programming, Algorithms, Assembly Programming, and more.

Technologies & Software

- Git
- SFML
- GLFW
- OpenGL
- OpenCV
- Balsamiq Mockups
- STL (C++)
- Wireshark
- GNS3
- Cisco Networking
- Unix/Linux
- Windows and OSX
- Visual Studio
- Android Studio
- NetBeans

Concepts

- OOAD / OOP
- UML
- Design Patterns
- Refactoring / Code Smells
- Algorithms
- Networking (TCP/IP)

Skills

- Communication
- Self-motivated
- Leadership
- Problem Decomposition
- Public Speaking
- Strong Interpersonal Skills

