**Estevon Odria**

(U.S. Citizen)

Contact information: *eodria@andrew.cmu.edu*

EDUCATION

**Carnegie Mellon University** Pittsburgh, PA

*Bachelor of Science, Electrical and Computer Engineering*

*May 2018*

WORK EXPERIENCE

**Esurance** San Francisco, CA

*Software Engineer*

November 2018 – Present

* Designing a Digital Wallet Spring Boot API to centralize all customer payment information across Esurance applications
* Set up API endpoints to support following payment method types: Zelle, electronic check, and card
* Set up online Mongo database to maintain payment methods and customer information
* Integrating Wallet API with external Mastercard Send API’s to tokenize (encrypt) sensitive customer information

*Software Engineering Intern*

May 2018 – August 2018

**Task**: independently implement core business logic of new Payment API system for Esurance

* Implemented several components such as client ReactJS payment form and a back-end API service
* Invokes external third-party encryption algorithms to hide card information
* Integrated Apache Kafka messaging system for efficient payment status notifications
* Introduced object-oriented programming methodologies, encapsulation principles and design patterns to IT Development team via summer presentations

**UnitedHealth Group** Schaumburg, IL

*Technology Development Program Intern*

June 2017 – August 2017

**Task**: utilize technology to innovate and improve the healthcare industry

**Bookit** (a booking room web application made for UnitedHealth Group developed with the Agile methodology)

* Created interface to let clients view entire floor map instead of previous five room limit
* Implemented AJAX for asynchronous and real-time filtering without page reloading
* Implemented backend logic to toggle room colors (green/red) based on availability
* Managed SQL database for integration with rooms for seamless filtering
* Proposed a business case to investors to highlight massive cost-reduction benefits of application

RECENT PROJECTS

**Malloc** (memory allocation package/library in C programming language)

Concept: Building from scratch a memory allocation package which returns an address to a payload in memory for use by a program

* Invoked a doubly-linked list implementation to keep track of all free (non-allocated) blocks on the heap
* Used segregated free lists to increase both throughput and peak memory utilization for performance purposes

**Tiny Unix Shell**

Concept: Implemented a small-scale version of the current Unix shell to allow for various commands by user

* Usage of concurrent programming with the use of Fork and parent/child processes
* Dealing with exceptional control flow, implemented signal handlers for jobs and processes

**Breaking into a web application**

Concept: hack into a web application hosted by cybersecurity class to better understand web security

* Used XSS attacks to hijack cookies to forge credentials and gain access to marketplace without login/registration
* Carried out a SQL injection attack to query about entries from another hidden table in the database
* Bypassed third-party payment service to purchase product listed for $99999 for $1 instead (goal of cybersecurity lab)

EXTRACIRRICULAR ACTIVITIES

**Chegg Tutors** Pittsburgh, PA

*Computer Science Tutor*May 2015 - Present

* Helped students develop and create efficient algorithms, assist programmers with principles of software construction
* 370+ positive reviews from students and parents

TECHNICAL SKILLS

**Debuggers:** GDB **Operating Systems:** Windows | Mac OS | Linux | Unix

**Collaboration Tools**: GitHub | Git **Programming:** Python | Java | C | JavaScript

**Database Management**: MySQL | SQL | MongoDB **Other:** Project Management | Cybersecurity| Strategy | Design