

# Ruben E. Lopez

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Citizenship: United States of America

## **Education**

University of Houston, Houston, Texas, United States of America

Bachelor of Mathematics, Graduating on May 2017

Diploma of Mathematics 2017

Bachelor of Computer Science, Completed May 2015

Diploma of Computer Science 2015

## **Work Experience:**

### **Hydro Burst - Remotely Operated Underwater Vehicle Project (R.O.U.V)**

**Information Technology Consultant and .NET Developer - C#/Java/HTML/CSS**

August 2015 - Ongoing

My role covered these responsibilities

#### **Programming:**

- Utilized up to .Net 4.6 and .Net 4.5 to configure network infrastructure between Vehicle and Controller.
- Artificial Intelligence development - Configuration and calibration Humidity, Temperature, Pressure sensors. Developed dynamic routines that can be sent through the Remote Control System during or before a mission to ensure the success and survivability of missions undertaken by the R.O.U.V.
- Developed Remote Control System for R.O.U.V - Capturing and converting sensor readings into readable metrics. (Humidity, Temperature, Pressure).
- Implemented a Pressure and Temperature Warning System.
- Power Management and Error Management for the R.O.U.V by implementing a Proportional-Integral-Derivative Controller (PID) system on motors and mechanical arms attached.
- Performance testing and reporting by method of Test-driven development (TDD) for sensors, controllers, networks and motors.

**Project Management:**

- Scheduling Daily SCRUM meetings for day to day Risk management.
- Time management for IT related tasks.
- Communicating with the engineering team in an Agile structure to ensure that the construction is aligned to the technical requirements set up by the stakeholders.
- Translating mission requirements set by stakeholders to technical requirements.

**Web Design:**

- Developed the Hydro Burst website utilizing HTML, CSS, and JavaScript.
- Created and maintained an asset repository for the website.
- Providing ongoing bug fixes and content updates to project website.
- Automation of workflow and task sequences through scripting.
- Agile methodology used in the creation of the R.O.U.V with emphasis of communication between Engineers and Programmers to ensure the success of the project.

**Project Manager & Game Designer**

July 2012 - December 2014 (2 Years & 5 Months )

I covered these responsibilities

- Project planning and conceptualization of games.
- Team leadership and motivating.
- Scheduling daily meetings and leading SCRUM stand ups.
- Windows OS and smartphone game development through Unity 3D, Unreal Engine, Scirra, Java.
- Dynamic AI development for games.
- Creating art illustration and graphical game assets.
- Facilitating learning and training for team members with workshops.
- Reporting Business Case, project progress and risk analysis to stakeholders.
- Quality assurance through functional testing and user acceptance testing (UAT).
- Creating technical writing deliverables for games.

**Portfolio****Games**

- Ace of Space (Action & Arcade Genre)
- Funky Nightmare (Adventure Genre)
- Quixo (Board game)

**Medical Equipment**

- Clear Lake Health Scanner (Prototype only)
- Virtual Reality Fence (Prototype)

**Websites**

- Hydro Burst - <http://hydroburst.net/>

## **Academic Experience and Achievements**

- Proficient in C++, C#, C, Java, HTML, CSS, SQL, Robot C and .NET.
- Experience in Javascript, Python, Linux, MatLab, R, jQuery, AJAX and XML
- Experience in developing programs utilizing programming styles such as OOP, SOLID and TDD.
- Proficient in creating analysis diagrams such as Unified Modeling Language (UML), ERD Diagrams and Logic Diagrams.
- Proficient in asset repositories such as Github, SVN and Maven.
- Experience in developing and analyzing data to support Business Goals using Business Analyst tools and methods. PESTLE, Six Sigma and SWOT.
- Ability to take Analysis and create meaningful reports for decision making through Risk Management, Task and process analysis and questionnaires.
- Proficient with Microsoft 365 Products including Skype for Business, Microsoft Project and Microsoft Visio.
- Solid understanding and implementation of PMBOK, Agile, SDLC, Scrum and PRINCE2 in previous projects.
- Experience working in Axosoft, Jira for day to day work prioritization.

## **Personal Qualities**

- Reliable. Can work hard individually to accomplish tasks properly.
- Very friendly and outgoing. I am motivated to uphold a positive environment.
- Co-operative. I always work well collaboratively and can synergize well with other people.
- Problem Solver. Given a problem I will observe it from all angles to come up with a solution.
- Good Communication Skills. I am able to communicate ideas and thought processes to those around me with ease in verbal or written form.
- Versatile. I can adapt to any positive or negative situation that may arise.
- Attention to detail. As an programmer, I strive for perfection in any work that I do.

## **References**

Professor Victoria Hilford | Senior Lecturer  
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