Ricardo Flores

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Education (Bachelor of Science)

Major: Computer Science **Minor**: Economics
Overall GPA: 3.05 **Major/Minor GPA**: 3.21 (Both out of a maximum of 4.0)
Native Languages: English, Spanish **Beginning Language**: French
Attended: August 2014 – December 2017
College: Christopher Newport University, 1 University Place, Newport News, VA, US, 23606

Experience

- Experience programming in Java (JDK & Android), C++, Databases (SQL, PostgreSQL) , XML (Android) and exposure to Python, HTML, C#, LISP, JavaScript, PHP, and Assembly.
- Exposure to Software Engineering processes and Agile methodologies, Documenting source code, Java GUI programming, debugging, JUnit testing, Static analysis and design patterns.
- Knowledgeable on analysis of algorithms, heuristic, and memoization.
- Knowledgeable on memory allocation techniques, memory pointer manipulation, threading, single/multi thread prioritization, String and IO manipulation, and multi-queue management.
- Experience with GIT, Eclipse/CDT, Microsoft Visual Studio, Android Studio, MySQLWorkbench, Docker, Microsoft Office, Windows OS, Mac OSX, Ubuntu OS

Projects

- **PUBG** (Player Unknown's Battle Grounds) **Wacky Stats** (Android app) (WIP) (Current Project) (August 2018 - Present)

  An app that searches for a player's in-game stats, but filters to only the game's weirdest, wackiest stats. Utilizes Swagger, JSON, and the videogame's API.

- **The Polaroid Experience** (Android app) (WIP) (Current Project) (August 2018 - Present)

  An app that exposes pictures to how Polaroid cameras used to take pictures, utilizing shake sensors.

- **Capstone Project** (Final University Project) (Open source project) (Sept – Dec 2017)

  Developed the Modifiable Intuitive Robot Controller (MIRC) framework, a universal vision based remote controller for robotic systems. The MIRC system uses the Leap Motion controller to gather three-dimensional anatomical arm and hand data points and converts them into goals or motion commands. Complex robot designs, such as robotic arms, are controlled using MoveIt!'s motion planning algorithms and robot configuration package. By using MoveIt!'s library, the framework can accommodate an ever-increasing number of complex robotic arm designs. MIRC is implemented in ROS (Robotic Operating System) in both simulation and hardware using the Kinova MICO arm and TurtleBot 2 mobile robot.

Publications

- K. Frizzell, R. Flores, A. Riedl, D. Conner (2018) “Modifiable Intuitive Robot Controller: Computer Vision-Based Controller for Various Robotic Designs”, IEEE SoutheastCon, Tampa Bay, Florida, April 19-22

Relevant Events

- **ACM Mid-Atlantic Programming Competition** (November 2016, Newport News, VA, US)

  Programming contest where teams of 3 attempt to solve 7 problems of varying difficulty within 8 hours. Took an active role in the team.

- **Dominion 2-day Hackathon** (October 2015, Norfolk, VA, US)

  Programmed an app and web design in a team of 7 students. The topic was university student life, and our submission dealt with a mutual sharing of objects between students, aptly named lend2me, within a university. Was one of many outspoken in the group.

- **IT Internship** (January - June 2013, Newport News, VA, US)
  On the job learning through being the entire IT staff for a local church. A lot of difficult task that was overcame daily. Many out of my area of expertise (Hardware, Software, Research)

Volunteering

- Parent Teacher Student Association (PTSA) member of a Newport News high school (Menchville)
  - Organize student events and budgetary/meetings work (2012-present)
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- Volunteer for the Physics, Computer Science and Engineering (PCSE) department of Christopher Newport University (CNU)
  - Event planner and head volunteer for their PizzaMyMind events (August 2014 - May 2017), where companies come to promote and hire students.
- STEM (Science, Technology, Engineering, and Mathematics) Day volunteer (CNU, June 2009-2010)
- Wendwood Neighborhood Association (WNA) member and volunteer (2008-present)
  - Helper of many outdoor activities that occurred around the neighborhood
- Camp Invention volunteer (CNU, July 2008-09)

About Me

- **Age**: 21 **Nationality**: Canadian **Resident:** United States, Canada **Marital Status**: Single
- **Multicultural**: resided in Canada (1996-2000, 2002-2003),
  Italy (2000-2002), and United States (2004-present), Mexican Heritage
- Ambitious and extremely curious
- Constructive and helpful
- Friendly and accepting
- Broad thinker and open minded
- Can function under stressful, time-limited environments
- Able to think broadly and critically, and learn within a short period of time