Juan Luis Burgos

juanlb1988@gmail.com || (254)-449-6995

Education

Bachelor of Science, Texas A&M University, May 2013
Majors: Computer Engineering and Applied Mathematical Science
Overall GPA: 3.63 / 4.00

Technical Skills

Familiar with Windows, MacOS, and Linux operating systems.
Experience programming in C/C++, Java, Ruby, Python, Lua, Shell, LaTeX.

Relevant Experience

Staff Software Engineer	**IBM Corporation** **Durham, NC**	**August 2016 - Present**

- Worked with international team to architect the integration of new data-analytics functionality into the IBM Cloud Pak for Multicloud Management performance monitoring product.
- Designed and implemented a dockerized micro-service that manages customer configurations for data-analytics functionality.
- Implemented two separate Lua-based Haproxy plugins that (a) authorize client API calls by validating bearer tokens and (b) redirect client API calls through region-specific proxy endpoints to support global customer base.
- Continuing development and support for multiple backend Ruby on Rails endpoints, maintenance of Apache and Haproxy servers, and inter-service integrations for SaaS products.
- Working directly with DevOps and Infrastructure teams to resolve customer issue.

Backend Engineer	**IBM Corporation** **Durham, NC**	**July 2014 - August 2016**

- Lead Ruby on Rails developer on our backend endpoint that manages the creation, modification, and destruction of SaaS subscriptions and integration with other services.
- Implemented backend scripts in Ruby, Perl, and Bash that supported E2E SaaS subscription life-cycle flows.
- Implemented web interface providing users with monitoring agent, configuration package, and development tool download capability.
- Supported infrastructure team in the introduction of new API flows.
- Assisted SaaS Operations team during product releases.

Software Engineer	**IBM Corporation** **Durham, NC**	**July 2013 - July 2014**

- Designed and developed a new Ruby on Rails agent for the Application Performance Monitoring on SaaS product.
- Daily interaction with global test teams to address bug reports and new feature requests.
- Assisted in the development of other monitoring agents (i.e. MongoDB, PHP).

Undergraduate Researcher	**Parasol Lab at Texas A&M** **College Station, TX**	**June 2010 - May 2013**

- Conducted research in the area of Sampling Based Motion Planning (SBMP) under the guidance of Dr. Nancy Amato.
- Worked on multiple research papers and completed senior research thesis as part of my B.S. Computer Engineering degree plan.
- Attended multiple research seminars and a Computing conference in Washington D.C.

| **Matlab Tutor** | **Texas A&M University** | **January 2009 - May 2011** |
| | **College Station, TX** | |

- Directly tutored both individual students and large groups on concepts ranging from Single to Multi-Variate Calculus, Differential Equations, and Linear Algebra using Matlab and MapleSoft programming languages.

| **SEE Math Camp Counselor** | **Texas A&M University** | **June 2009, 2010, 2011** |
| | **College Station, TX** | |

- Mentored middle school students in their exploration of the world of mathematics through group activities and MapleSoft programming at annual math-oriented summer camp held by the Texas A&M Department of Mathematics.

Honors and Memberships

Cum Laude Honors, 2013
Undergraduate Research Fellows Honors, 2013
University Honors, 2013
Engineering Scholar Honors, 2013
Upsilon Pi Epsilon Membership, 2013
Dean's List, 2008 - 2013
Distinguished Student Award, 2010
Pi Mu Epsilon Membership, 2009
Title of Computer Science Ambassador, 2008 - 2009 & 2010 - 2012
Student Engineers' Council, 2008 - 2011

Publications

Juan Burgos, Jory Denny, Nancy M. Amato, *"Improving Roadmap Quality through Connected Component Expansion,"* Technical Report, TR13-003, Texas A&M University, Apr 2013.

Samuel Rodriguez, Jory Denny, Juan Burgos, Aditya Mahadevan, Kasra Manavi, Luke Murray, Anton Kodochygov, Takis Zourntos, Nancy M. Amato, *"Toward Realistic Pursuit-Evasion Using a Roadmap-Based Approach,"* In Proc. IEEE Int. Conf. Robot. Autom. (ICRA), pp. 1738-1745, May 2011.

Sam Ade Jacobs, Kasra Manavi, Juan Burgos, Jory Denny, Shawna Thomas, Nancy M. Amato, *"A Scalable Method for Parallelizing Sampling-Based Motion Planning Algorithms,"* In Proc. IEEE Int. Conf. Robot. Autom. (ICRA), pp. 2529-2536, St. Paul, Minnesota, USA, May 2012.

Samuel Rodriguez, Jory Denny, Aditya Mahadevan, Jeremy (Cong-Trung) Vu, Juan Burgos, Takis Zourntos, Nancy M. Amato, *"Roadmap-Based Pursuit-Evasion in 3D Structures,"* In Proc. of 24th Intern. Conf. on Computer Animation and Social Agents (CASA), 2011, in Transactions on Edutainment, pp. to appear, May 2011.

References Available Upon Request