# Juan Luis Burgos

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## 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** | **August 2016 - Present** |
|---|---|---|
| | **Durham, NC** | |

- Developing IBM Cloud Monitoring capabilities for Instana observability and application monitoring.
- Developing a dockerized micro-service that manages per tenant configurations.
- Worked with international team to integrate data-analytics functionality into the IBM Cloud Pak for Multicloud Management performance monitoring product.
- Worked with APMSaaS DevOps and Infrastructure teams to resolve customer issues, perform infrastructure migrations, and apply PSIRT patches, etc.
- Supported multiple backend Ruby on Rails endpoints, maintenance of Apache and Haproxy servers, and inter-service integrations for SaaS products.
- Implemented Lua-based Haproxy plugins for several backend infrastructures supporting SaaS products.

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

- 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 Ruby gem that provided per-process performance monitoring for Ruby on Rails applications for the Application Performance Monitoring on SaaS product.
- Implemented backend scripts in Ruby, Perl, and Bash that supported E2E SaaS subscription lifecycle 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** | **July 2013 - July 2014** |
|---|---|---|
| | **Durham, NC** | |

- 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** | **Texas A&M University** | **June 2010 - May 2013** |
|---|---|---|
| | **College Station, TX** | |

- 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

*Undergraduate Research Fellows Honors*, 2013
*Engineering Scholar Honors*, 2013
*University Honors*, 2013
*Cum Laude 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