

# Guillermo Narvaez-Paliza

Website: [www.guillermonarvaez.com](http://www.guillermonarvaez.com) | GitHub: [github.com/guillonapa](https://github.com/guillonapa)  
75 Brainerd Rd. Apt 511, Allston MA, 02134 | 949-285.2892 | [guillonapa@gmail.com](mailto:guillonapa@gmail.com)

## EDUCATION

**Brandeis University**, Waltham, MA

May 2018

Bachelor of Science in **Computer Science** and **Physics** (Minor in **Mathematics**)

GPA: **3.765 (Magna Cum Laude)**

## RELEVANT COURSES (Brandeis University)

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- Programming in Java
- Discrete Structures
- Software Entrepreneurship
- Data Structures and Algorithms
- Structure & Interpretation of Programs
- Scientific Data Processing
- Operating Systems
- Electronics Laboratory
- Theory of Computation
- Database Management Systems
- Capstone: Software Engineering
- Advanced Programming Techniques
- Theory of Probability & Statistics
- Multivariable Calculus/Applied Linear Algebra

## SKILLS

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### Languages

- Java
- Ruby
- JavaScript
- HTML
- CSS

### Web Development

- MERN Stack
- Ruby on Rails
- Grunt, Webpack, etc.

### Other

- Eclipse Plug-in Development (extending the Eclipse framework)
- Linux/Unix
- Database Management (SQL)
- Data Structures
- Advanced Algorithms
- UX
- Eclipse
- Maven
- Docker

### Source Control

- Git
- Svn

### Testing

- JUnit
- Minitest
- Mocha

## EXPERIENCE

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**TIBCO Software Inc.**, *Software Engineer*, Waltham, MA

July 2018 - Present

- Design and develop features for the TIBCO StreamBase Studio IDE (development done in Java, against Eclipse APIs)
- Author original design documents by interviewing field, customer and support databases
- Integrate current projects with other company products and/or support clients
- Design and create fully integrated demos used to demonstrate feature functionality and best practices
- Integrate and support features that enable the support team at TIBCO to address and troubleshoot complex customer issues
- Provide support for the StreamBase Project by triaging and resolving support requests from customers and other engineers

**Brandeis University**, *Data Structures & Algorithms Head Teaching Assistant*, Waltham, MA

August 2017 - May 2018

- Organize and lead review sessions for undergrad students
- Design data structures and algorithms problems and programming assignments for students
- Lead a group of six teaching assistants for a course with over 80 students

**TIBCO Software Inc.**, *Software Engineering Intern*, Waltham, MA

June 2017 - August 2017

- Developed the front and back end of a support wizard that enables users to troubleshoot software issues
- Shipped features for the company's event processing software using Java
- Designed and developed a live-analytics demo using stream processing
- Customized the web interface used for the company's data visualization software

**Brandeis University**, *Complex Fluids Researcher*, Waltham, MA

February 2016 - June 2017

- Researched at Rogers Lab studying soft matter and self-assembly processes
- Used microscopy techniques in order to identify patterns in equilibrium states and phase transitions
- Used graphic methods to process and analyze experimental data
- Wrote Matlab programs to simulate system behavior for any combination of physical parameters
- Derived mathematical models from fundamental chemical and physical principles to explain complex systems

## LEADERSHIP / ACTIVITIES

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• **Head Teaching Assistant** at Brandeis University (Computer Science Dept.)

January 2018 - May 2018

• **Captain and member** of the Brandeis Fencing Team (NCAA)

August 2014 - May 2018

• **Captain** of the Fencing State of Mexico Squad

May 2009 - August 2015

• **Member** of the Fencing National Team

February 2014 - August 2015

## HONORS / AWARDS

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- Michtom Prize for Academic Excellence in Computer Science

- Excellence in Physics Faculty Award
- All-Star First Team Athlete in Northeast Fencing Conference / Mexican Fencing National Champion
- All-Academic Honors (University Athletic Association)
- All-Star First Team Athlete in Northeast Fencing Conference / Mexican Fencing National Champion

## **SCHOLARSHIPS AND FELLOWSHIPS**

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### **Landsman Charitable Foundation Endowed Scholarship**

February 2016

- Awarded to a Brandeis undergraduate student who excels in the sciences and shows great interest in engineering

### **Materials Research Science & Engineering Centers (MRSEC) Fellowship**

May 2016

- To support a project on DNA-induced self-assembly systems, their equilibrium states, and phase transitions

## **PRESENTATIONS**

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“Quantitative Study of Linker-Mediated Binding Between DNA-Coated Colloids,” poster presentation, Summer Science Research Program, Brandeis University, Waltham, MA, August 2016

## **PUBLICATIONS**

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“Linker-mediated phase behavior of DNA-coated colloids” arXiv, (2019). Link: <https://arxiv.org/abs/1902.08883>.

## **PROJECTS**

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My software development projects can be seen at [guillonapa.github.io](https://guillonapa.github.io) or [github.com/guillonapa](https://github.com/guillonapa).