

Raphael Gontijo Lopes

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github.com/iRapha

raphagl.com

EDUCATION

Georgia Institute of Technology, Atlanta, GA, USA

August 2014 - May 2018 (expected)

- GPA: 4.0. Candidate for Bachelor of Science in Computer Science

Bernoulli High School, Belo Horizonte, MG, Brazil

February 2012 - December 2013

- GPA: 91.5% - top 20 in a 300 student class

SKILLS

Programming Languages: Python, JavaScript (and Node.js), C, Java, Swift, HTML5, Jade, CSS, Stylus, PHP, SQL, Octave

External Libraries: express, MongoDB, web.py, jQuery, ncurses, Pygame, nltk

Spoken Languages: English (fluent), Portuguese (fluent / native speaker)

Software: Git, PhotoShop, Audacity/GarageBand/LogicPro, iMovie/FinalCutPro

WORK EXPERIENCE

Google Software Engineer Internship EP - Google Analytics

Summer 2015

PROJECTS

Pretty Graphs

Spring 2015

- Python library that uses simulated annealing and gradient descent to find the most visually appealing configuration of a graph.
- Implemented the Simulated Annealing and Gradient Descent algorithms, and designed the heuristics for the cost function.
- Designed and created a wrapper for the algorithm for developer ease of use.
- Source and Instructions - github.com/gtagency/graph-reduction

Text Simplifier

January 2015

- A chrome extension that attempts to simplify text from the current web page for children to better understand it.
- Created the semantic trees from raw text, using python's nltk NLP library.
- Designed the logic of removing branches from the semantic tree to maximize text readability and understanding.
- Created the basic functionality of the chrome extension and connection to our NLP backend.
- Source - github.com/RobertoTakesMHacks/TextSimplifier

INPHO! (Hack ATL - Winner of "Best Open Source Hack")

November 2014

- A web app that uses location data to give the user the information of the business they are currently at. Just open the app and see the menu, specials, and interactive features. Businesses can sign up on our website.
- Developed the entire backend/database logic using JS, NodeJS, express and MongoDB, using Mongo's GeoNear feature.
- Designed and developed the entire front-end (including UI/UX) with Bootstrap, JS, and the google maps api.
- Beta available online - inphoapp.com || inphoapp.com/nearby

ASL Leap (HackDuke - Winner of "Best Use of Leap Motion" & "Best Versal Gadget")

November 2014

- An online gadget that teaches the American Sign Language with a Leap Motion, by verifying correct hand/finger position.
- Interfaced with the Leap Motion to gather hand tracking data using JS and the Leap Motion JS API.
- Created a schema for verifying the correct ASL hand position. Expandable to many hand/finger positions of the ASL.
- Developed the gadget using the Versal API. - Conceptualized and designed the UI and UX.
- Source - github.com/iRapha/LeapVersal

They Should Have This

September 2014

- A web app developed during HackGT for users to share ideas and find people interested in developing them.
- Developed the entire backend logic using JS, NodeJS, express and MongoDB.
- Designed the database schema and interface, as well as the API used to connect it to the front-end.
- Conceptualized and designed the UI and UX.
- Online: theyshouldhavethis.herokuapp.com/
- Source Code: github.com/TheyShouldHaveATeam/TheyShouldHaveThis

Conn Wars (Ludum Dare 30)

August 2014

- Worked in a team to create an online strategy game in under 72h, ranked #42/1000 for "theme" and top 25% for "innovation".
- Created the majority of the algorithms facilitating game logic, as well as the functions for A.I. integration.
- Designed the game's UI and created all visual graphics.
- Playable online - connwars.com
- Source - github.com/GTludumDare/ludum-dare-30

LEADERSHIP/ACTIVITIES

Model UN

2011, 2012, 2013

- Participated in over 3 model UNs, including some in a foreign language (english).

Filmmaking, Group Leader/Editor/Director

February - December 2012

- Directed and edited over 7 short films with a various student groups throughout the year.

OTHER

- Painting/Drawing/Art, Reading, Longboarding, Video games, TV Shows (Community, Arrested Development, OITNB, etc).