Education:

The American University in Cairo. Class of 2016: B.Sc. Computer Science

Work Experience:

IBM . Software Engineering Intern . Jul 2014 - Aug 2014:

- 1. Trained Current Employees and Interns on How to use several IBMs Bluemix Cloud services
- 2. Designed a skeleton Mobile Application & API to work with Bluemix Cloud Services (Node.js . Sinatra Ruby . Worklight)

CivilSoft . Front-end Web Developer Intern . Nov 2013 - Feb 2014:

- 1. Created the frontend of a web application which guides the user to setup the structure of his website
- 2. Developed Javascript Plugins to be used in the development cycle

Selected Projects and Achievements:

- 1. Verilog Web IDE/Simulator . Python 2.7 . RabbitMQ . Node.js . Sails.js . Postgres . Backbone.js: Experimental Verilog Web Editor and simulator divided into three main modules; the core module written in python and communicates with the api module (written in Node.js) through a message queue server which communicates with the frontend module (constructed with backbone.js)
- 2. Quine McCluskey Circuit Drawer . Python 2.7 . Flask . Coffeescript . Backbone.js . Joint.js: Given the terms of the boolean function, minimizes the boolean function and draws the circuit. Github
- 3. Cache Simulator . Coffeescript . Ember.js . D3.js . NodeWebkit: Simulates User Defined Types of Caches and automatically presents live Graphs.
- 4. MIPS Disassembler/Simulator . Python 2.74 . Qt4.8 . Pyside: Disassembles Binary MIPS files and Simulates The Product.
- 5. **Linux CLI OS**: Built and assembled a linux OS from source using existing open source packages (kernel, awk, glibc .etc) without using existing Linux Distros.
- 6. Comic Hunter . Python 2.7 . BeautifulSoup . Requests: Scrapes Popular web comic series like xkcd, cyanide & happiness and the oatmeal.
- 7. Competitive Programming . Python 2.7 . C++: Finished 50 Problems on Projecteuler, ranked 2246 on Hackerrank.com, ranked 766 on Hacker.org and participated in the 2014 ACM ECPC.
- 8. Pig Data Analysis . Hadoop . Mapreduce . Pig . Java . R . ggplot: Using a Local installation of Hadoop and Pig analysed some properties of an approximately 375 GB of data and plotted it using R.
- 9. **Digit Recognizer** . R: Using existing training datasets and K-Nearest Neighbours Algorithm, trained a model to recognize a handwritten digit with an average precision of 0.94.
- 10. Contribution to Open Source Projects on Github

Extracurricular Activities:

- 1. **Webmaster . Student Union . Fall 2012 Spring 2013**: Single Handedly Designed, Developed and Maintained The Student Unions Website
- 2. Computer Science and Engineering Association . Fall 2012 Spring 2013: In a team of 3 people we designed, developed and maintained the CSEA website

Languages and Technologies. From a familiar level to a very Good level:

- 1. Python . Javascript . Coffeescript . CSS . HTML . C++ . MIPS Assembly . R . Ruby . SQL . Erlang . Java . LATEX
- 2. Unix . Node.js . JQuery . Git . Ember.js . Backbone.js . Sails.js . Express.js . Heroku . Bluemix . Grunt . $\overline{\text{Qt}}$. Hadoop . MapReduce . Pig . D3.js . MongoDB . CouchDB . SQLDB2 . Cloudant . Rails

Links:

GitHub: www.github.com/omarayad1 Google Plus: plus.google.com/+OmarAyad1 Facebook: www.facebook.com/omarayad93 Linkedin: eg.linkedin.com/in/omarayad1 Flickr: www.flickr.com/omarayad1/sets