

Abdelrahman Hosny

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Summary

I'm a data-driven software engineer. I write code, analyze datasets, implement algorithms, and automate processes.

Skills

Data analysis, algorithm design/implementation, statistics, machine learning, deep learning, Python, Docker, NodeJS, JavaScript, HTML, CSS, Linux administration, shell scripting, Cloud Infrastructure, web APIs, Micro-Services (know but haven't used recently): Ruby, Java, C++, .NET, Redis, MySQL, PostgreSQL

Experience

- *Research Assistant* | Center for Quantitative Medicine, Farmington, Connecticut (Jan 2016 – Now)
- *Research Intern* | Sheida Nabavi group at CSE department, UConn, Storrs, CT (Summer 2016)
- *Teaching Assistant* | Computer Science and Engineering Department, UConn, Storrs, CT (Jan 2015 – Dec 2016)
- *Research Assistant* | Comcast Center for Hardware Assurance, UConn, Storrs, Connecticut (Jan-Dec 2015)
- *Software Engineering Intern* | Center for Quantitative Medicine, Farmington, Connecticut (Summer 2015)
- *Teaching Assistant* | Assiut University, Assiut, Egypt (2013 – 2014)
- *Software Engineering Intern* | ITWorx for IT Services, Cairo, Egypt (Summer 2012)

Education

Masters in Computer Science | December 2016 | University of Connecticut, USA | GPA: A

Certificate of College Instruction | December 2016 | University of Connecticut, USA

Bachelor of Computer Science | July 2013 | Assiut university, Egypt | GPA: 4.0 | Rank: 1st

High-school | July 2009 | Dar Heraa High School, Egypt | Grade: 99.6% | Rank: 1st all over Egypt, Math section.

Featured Publications

Check the full set of publications at: <http://scholar.abdelrahmanhosny.me>

Hosny A., Vera-Licona P., Laubenbacher R., Favre T. (2016) AlgoRun, a Docker-based packaging system for platform-agnostic implemented algorithms. Bioinformatics.

Featured Projects

Check the full set of projects at: <http://github.abdelrahmanhosny.me>

- **Integrative Analysis of Heterogeneous Genomics Data for TNBC and Ovarian Cancer [Master's Thesis]:** Analyzed ~2.5T of genomic data for cancer patients; identified 6 genes (out of 20k) that were related to the drug resistance when affected by aberrations; **focus:** data analysis, machine learning, computational biology.
- **EasySCNVSim:** Automated a computational pipeline for simulating tumor genetic variations; saved time and effort of executing the individual steps of the computation; **focus:** Docker, web development, automation.
- **TURING** (www.discretedynamics.org): A crowd-sourced platform for algorithms and analysis pipelines focused on time- and state-discrete dynamical systems; **focus:** Docker, NodeJS, Python Django, server administration.
- **Deep learning models on Saccharomyces Cerevisiae genome:** Trained deep learning models (RNN, LSTM, GRU, RBM, DBN, AE) to identify the origin of replication in Saccharomyces Cerevisiae yeast genome; achieved detection accuracy of ~31% which was promising for genomic data (# of features >> # of samples); **focus:** Python, TensorFlow, Deep Learning
- **AlgoPiper:** A visual tool to create data analysis pipelines from AlgoRun's algorithms; **focus:** web APIs, bash.
- **Fraud detection from user login information:** Achieved 86% accuracy of detecting compromised accounts from Comcast's server log files utilizing a hybrid model of statistical models, data mining and classification algorithms; **focus:** software engineering, data science

Honors and Awards

(2015) UConn Graduate Student Intern of the Year Honorable Mention, University of Connecticut, USA

(2013) One of Top 10 Debaters Medal and Award, 2nd IUADC, Al Doha, Qatar

(2009) Coca-Cola Education Award, Assiut Governorate shield, Assiut Municipal Council shield

Facts about me

I once broke my fears and did a Skydiving from 15,000 feet

Long CV: <http://cv.abdelrahmanhosny.me>

Last updated: March 2017