



Ahmad Atallah

Curriculum Vitae

EDUCATION

- 2012—2017 **Systems and Biomedical Engineering Departement. School of Engineering, Cairo University**
Cairo, Egypt
- Bs.c. of Systems and Biomedical Engineering, GPA 3.2.
 - THESIS TITLE – GPU-Based Visualization Application for Two Projection 2D-3D Image Registration In Radiaiton Oncology

COURSEWORK

- Feb 2019 —Apr 2019 **Functional Programming in Scala Specialization —Coursera**
- Functional Programming Principles in Scala.
- Feb 2018 —Aug 2018 **Front-End Nanodegree —Udacity**
- Apr 2018 **Deep Learning Specialization —Coursera**
- Neural Networks and Deep Learning.
 - Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization

EXPERIENCE

- Dec 2018—Present **Software Engineer at Swvl**
- I am working on developing company's dashboards which includes a lot of front-end visualizations on maps and D3. I had the chance to start one project there from scratch besides my contributions in the existing projects. Stack: NodeJS, AngularJS, React, Redux. Besides attending workshops about one of organization projects written in Scala.*
- Feb 2018—Dec 2018 **Software Engineer at Millensys Healthcare Solutions**
- I joined the medical imaging team to deliver and contribute in healthcare software solutions. My work included and not limited to using OpenJPEG, LEADTOOLS, Windows API, OpenGL, migrating from OpenGL to WebGL, drawing on canvas, advanced image processing techniques, 2D and 3D visualization (DICOM viewing, processing, and MPR). Through my working period I was assigned to advanced DICOM viewer project(web based, and Desktop), reporting tool and others.*
- Oct 2017—Jan 2018 **Bioinformatics Intern at Pine Biotech**
- Working on both educational and analysis platform provide me with great experience in understanding Next Generation Sequencing and its algorithms in Bioinformatics era.*

SKILLS

- Programming** Javascript, Typescript, ReasonML, Scala, Ruby, Pascal, C/C++, OOP, Functional Programming.
- Web Frameworks** React, Redux, Jest, Enzyme, Jasmine, Angular, Socket.IO.
- Style Toolkits** Tachyons, Styled Components, MDX
- Visualization Tools** ThreeJS, D3, WebGL (Intermediate).
- Build Tools** Webpack, sbt, CMake, Maven, Gulp.
- Scientific Packages** Octave, IPython (Intermediate)
- Office Programs** L^AT_EX, Microsoft Office.
- Database** PostgreSQL, Mongo, GraphQL
- OS** Windows, Linux.
- Version Control** Git, SVN.
- Others** Vim, Docker, Jenkins, Shell Scripting.

PROJECTS

- | | |
|--------------------------|--|
| 2019 | Swvl Corporate Dashboard <ul style="list-style-type: none"> I was responsible on initiating the project from scratch. Started by adding my own components including map, search, table components, and others. The project manages corporate trips, lines, and employees besides daily statistics. I used socket.io to keep location on maps tracked and visualized in real-time. Development —React, Redux, Jest, Enzyme, Socket.io ,Webpack, Tachyons, Docker. |
| 2017 | GPU-Based Visualization Application for Two Projection 2D-3D Image Registration In Radiation Oncology —Graduation Project <ul style="list-style-type: none"> Visualization software application for fast 2-projection 2D-3D rigid registration that assists in patient positioning process during radiation oncology treatment procedures. The software development included rendering multiple digitally reconstructed radiographs(DRRs) projection images from 3D CT volume, similarity measures, optimization, and a user interface to visualize the differences. Development —C/C++, VTK, ITK, Qt, Qthread, OpenMP, OpenCL. ADVISOR —Tamer Basha. |
| December 2016 | TCP/IP-Based Bullet Shooting Multi-Player Game —School Project(Game - Networking).
A two-sides game (client-server) that data is shared through TCP protocol. The game implemented using Python and Tkinter module for building the graphical user interface. |
| October 2015
—Present | Solving Bioinformatic Problems on Rosalind —Personal Practice
I spent a practice time trying to solve Bioinformatic problems on Rosalind using Python . |

AWARDS & ACTIVITIES

- | | |
|---|---|
| August 2015 | IEEE EMBS International Student Conference —Project Award .
<i>My Project, Derma, was awarded the 1st place in 2014 from the IEEE EMBS.</i> |
| 24 th —27 th October 2015 | EMB 2nd Biomedical Engineering Workshop.
<i>Participated in the 4 themes of the workshop including:</i> <ul style="list-style-type: none"> High Performance Computing. Medical Visualization. Software Engineering & Bioinformatics. Embedded Systems. |
| October 2016 | RDI Egypt Competition —Project Award .
<i>My project, an automatic system for MCQ exams correction, was awarded the 3rd place in 2016 from RDI Egypt.</i> |
| 26 th — December 2017 | CIS 2nd Bioinformatics Workshop.
<i>The workshop provided by Nile University, Center of Informatics (CIS). I have the interest to attend three workshops including:</i> <ul style="list-style-type: none"> Operating Systems for big data in the field of Bioinformatics. Understanding steroid signaling in the brain using co-expression networks. How to use deep learning on biological data. |