Amr Hassaballah

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Experience

SOFTWARE ENGINEER, AVIDBEAM; CAIRO, EGYPT   JAN 2017 - AUG 2019

Front-End Architecture and Development

- Developed frontend web interfaces for a face recognition VMS and a video/LIDAR annotation solution:
  - Designed and Implemented rtsp stream playback, profile management, analytics dashboard, LIDAR point cloud visualization and video annotation views
  - Utilized React, Ruby on Rails and RethinkDB to implement a Restful design architecture
- Maintained two repositories which included reviewing, testing and merging code generated by my peers

Past Achievements:

- Programmed a set of Python scripts to fully automate testing the ATUN video analytics platform and its plugins
- Generated logs proving performance flaws; data led to improvements in precision and recall for the License Plate Recognition plugin (LPR)
- Improved LPR to stream detections in real time to all logged in clients in sync by utilizing web sockets

INTERN, DAR ENGINEERING; CAIRO, EGYPT   JUN 2014 - SEP 2014

- Designed luminaire layout for office blueprint utilizing twenty five percent less power than the proposed plan
- Implemented power outlet circuit breakers in accordance to international building codes and regulations
- Considered power outage requirements, such as uninterruptible power supply systems for server rooms

Education   SEP 2011 - DEC 2016

University of Wisconsin, Madison – B.S Double Major in Electrical Engineering & Computer Science

Projects & Coursework

Please visit my website hammeramr.github.io/html/projects.html for source code and more projects

FOUNDATION OF MOBILE SYSTEMS & APPLICATIONS

- Collaborated with team to produce Virgil, an android application aimed at improving the museum experience
- Integrated Estimate Proximity Beacons to automatically view relevant information as a user approach an exhibit
- Assisted in developing XML layouts for various menus in addition to exhibit object models

INTRODUCTION TO COMPUTER LANGUAGES & COMPILERS

- Worked with team member to produce a fully functional compiler for the "cats" educational computer language
- Generated a JLex lexical analyzer using regular expressions to convert raw text into tokens
- Produced a JavaCUP syntax analyzer by specifying a formal grammar for the "cats" language
- Developed a type and name checker to make sure identifiers conformed to the given rules

Skills

COMPUTER LANGUAGES

Java Script, Ruby, C++, Python, Java, ARM Assembly, x86 Intel Assembly and Verilog

Libraries, Frameworks and APIs

React, Redux, ThreeJS, RabbitMQ, NodeJS, MongoDB, Elastic Search OpenCV, OpenML, and ffmpeg