Ahmad M. Osman

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Education

Bachelor of Arts, Computer Science and Data Science Luther College, Decorah, IA
Overall GPA: 3.78 · Computer Science GPA: 3.81 · Data Science GPA: 3.95 Aug 2016 - May 2020

Coursework: Computational Models, Internet Programming, Programming Languages, Algorithms & Data Structures, Applied Stats, Data Visualization & Analysis, Machine Learning, Computer Networks, Operating Systems & Architecture.

United World College Maastricht Maastricht, Netherlands
International Baccalaureate Bilingual Diploma Aug 2014 - Jul 2016
Languages: Arabic, English

Languages and Technologies

Highly Skilled: Python, Flask, Linux, Bash, Git, SQL, PostgreSQL, Javascript, HTML, CSS, Bootstrap
Prior Experience: Go, C#, Java, R, NoSQL, MongoDB, Latex, D3.js, Pandas, Numpy, Scikit-Learn, XML, JSON

Work Experience

CloudInn - Fully Integrated Total Hotel Solution Cairo Governorate, Egypt
Software Engineer Intern Jan 2018 - Feb 2018
- Implemented concurrent Booking.com API library in Golang through TDD to CRUD and Map hotels' reservations, rooms, deals, and other features with Booking.com. The logic prevented any reservations' overlaps, overbooking, etc.
- Implemented concurrent storage library in Golang and MongoDB through TDD to store hotels' reservations, rooms settings, deals, and other features of different Online Travelling Agencies. Replaced an older PostgreSQL DB.

Luther College Software Development Team Decorah, IA
Software Engineer May 2017 - Sep 2018
- Troubleshoot the college's Ellucian Colleague Self Service ERP web portal.
- Upgraded the ERP web portal specifying roles and access levels for different user groups.
- Linked the old students' web portal to the newly launched students' web portal.
- Wrote Web-API endpoints and customizations in C# and Knockout.js to retrieve custom data from the ERP DB.
- Designed, edited, and executed JMeter Performance Test Plans.

Luther College Computer Science Department - Data Modelling & Querying Decorah, IA
Teacher Assistant, Preceptor, Tutor, and Grader Dec 2016 - Present
- Writing Python scripts to check and verify students' queries and give instructions toward the expected query output.
- Working with Relational Algebra, SQL, Python, and PostgreSQL DB to develop new assignments and lessons plans.
- Assisting students in class and communicating common problems to the Professor.

Projects ⌘

Bandersnatch Life · Javascript, D3.js, Python, HTML, CSS, Bootstrap Bandersnatch.Life · Dec 2018 - Jan 2019
- Interactive Black Mirror: Bandersnatch Movie Paths Website.
- 25,000 Unique Visitors in The First Week Of Publication.
- The GitHub repo was viewed 8,000+ times & starred 150+ times.

Best Car Deal · Python, Pandas, Javascript, D3.JS http://bit.ly/2FSgveK · Oct 2018 - Dec 2018
- Scraping, Visualizing, and Analyzing 1,700,000 Entries of Used Cars for Sale on Craigslist to Find The Best Car Deal.
- Scraper, Notebooks, and Interactive Web App: http://bit.ly/2DA0isj

Networking Tools Implementations · Python http://bit.ly/2HwrVXd · Sep 2018 - Dec 2018
- Implementations of Simple Client and Server, DNS Resolver, DNS Server, Web Server, Ping Tool, Traceroute Tool, and Distance Vector Routing Protocol.

Where Is It Streaming · Python, Flask, JS, Bootstrap, SQL http://bit.ly/2DDD2d5 · May 2018 - Jun 2018
- Movies Streaming Services Finder and Movies Database Explorer Web App.

Heated World · Python, Flask, JS, Bootstrap, Elasticsearch http://bit.ly/2CNR1vn · Feb 2018 - Apr 2018
- Interactive Live World News Heat Map with Natural Language Processing, Summaries, and Reddit Discussions.
- Heated World Map Based on Filtered News via Reddit with Articles Summaries. Demo on GitHub.

JCoCo Virtual Machine · Java, Python http://bit.ly/2DAywfB · Feb 2018 - Apr 2018
- JCoCo: Implementation of the Python Virtual Machine in Java. Implemented the Frozenset Python class.

FIFA 18 Players' Wages Statistical Analysis · R http://bit.ly/2TgYhab · Oct 2017 - Nov 2017
- Multiple Linear Regression Analysis using R and different statistical models to understand the underlying decisive factors of players' wages.

Awards, Activities, and Achievements

Dean's List	All Semesters
Davis Scholar	Aug 2016 - Present
United World College Egypt National Committee Member	Sep 2015 - Present
2D Game Designing Club Founder, UWC Maastricht	Sep 2014 - Jul 2015
TOK Conference Organizing Team Member, UWC Maastricht	Sep 2014 - May 2015
Crowdfunded 50,000 USD to Attend UWC Maastricht	Apr 2014 - Aug 2014