Yahya M. Gilany

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Education

University of Cincinnati, Cincinnati, OH, USA *2016-2018*
Master of Science M.Sc., School of Information Technology.
Concentration: Networking and Infrastructure Track – Machine Learning.
- Awards and Honors:
  - Dean's List 4.0 GPA (Spring 17, Fall 17, Spring 18)
  - Graduate Assistantship (Fall 16, Spring 17, Fall 17, Spring 18)
- Cumulative GPA: **3.974**

University of Cincinnati, Cincinnati, OH, USA *2015-2018*
Bachelor of Science B.Sc., School of Information Technology.
Concentration: Information Technology, Software Application Development.
- Awards and Honors:
  - Summa Cum Laude
  - UC Global Scholarship
  - Dean's List 4.0 GPA (Spring 16, Fall 16, Spring 17, Fall 18, Spring 18)
- Cumulative GPA: **3.985**

Cairo University, Egypt *2012 - 2015*
Bachelor of Science B.S., Faculty of Engineering
Concentration: Aerospace and Aeronautics.
Transferred to the University of Cincinnati before the completion of the program

Computer Skills

Programming Language:	JavaScript, TypeScript, C#, Java, SQL, C/C++, Python, R, HTML5/CSS3, MATLAB/Octave.
Platforms, Frameworks, and Technologies:	Node.js, Angular.js, Angular, Ionic, React.js, Vue.js, Autodesk Forge Cloud Developer Platform, Xamarin, ASP.Net Core 2.0, Microsoft SQL Server, MySQL, PostgreSQL, NGINX, Docker, Kubernetes, Jenkins(CI/CD Automation Server), Drone (CI/CD Automation Server), RabbitMQ (Message Broker Software), D3.JS, Jekyll, jQuery, Unity (Game Engine), SolidWorks (3D Modelling), LabVIEW.
Operating Systems:	Linux (Ubuntu, SUSE, CentOS), Windows Server, macOS, Windows
Photo and Video Editing:	Photoshop, Premier, Screenflow.

Work Experiences

University of Cincinnati Information Technology Solutions Center (ITSC)

Research Associate with Assistant Director duties *Feb. 21 - Present*
- Manage different IT services offered by the center to various clients.
- Ensure efficient and successful operation.
- Supervise ITSC staff and students.

Research Associate with Tech Lead duties *July. 18 - Present*
- Responsible for all phases of the software development life cycle including inception, elaboration, construction, and transition/deployment.
- Responsible for all activities in the iterative development process including requirements gathering, design, development, testing, and deployment.
- Responsible for establishing and performing an Agile software development processes with Scrum including sprint planning, sprint retrospectives and daily standups.
- Responsible for the standardization and documentation of the technical operations and processes to boost productivity and allow for the ITSC expansion and growth.
- Responsible for the solutions and systems' design and architecture.

Cont. Research Associate with Tech Lead duties *July. 18 - Present*

- Responsible for the establishment of the Development-and-Operation (DevOps) as practice in ITSC improving the quality of the produced work through automation, streamlining the continuous deployment of the various systems, and achieving better observability of the system and application logs, metrics, and key performance indicators (KPIs).
- Responsible for business-to-business (B2B) system integration for two major software eco systems developed at the ITSC.
- Responsible for addressing client's evolving software needs including enhancements, additional features, and bug fixes.
- Responsible for staying up to date with emerging technology trends and industry standards, planning for updating and modernizing current and legacy systems.
- Mentored student workers thorough the process of building a C++ and C# script for Autodesk's Forge Design Automation API. The script receives area allocation markups created through the Square Footage Collection application[1], overlays them on an AutoCAD floor plan and exports a vectorized version of the annotated floor plan.
- Mentored a student intern through the research and implementation of building machine learning statistical models to evaluate the effectiveness of correctional programs in the state of Ohio using Python and Scikit-Learn library.
- Architected a midsized software ecosystem for a staffing company. The solution is built in a multi-layered client-server architecture and consists of a Gateway server API as a backend service, a web application built with Angular and a cross-platform mobile application built with Ionic.
- Re-architected and developed a software ecosystem built in a microservice architecture for a fortune 200 public retailing company.
- Re-designed and developed a large-scale
- Researched and evaluated different cross-platform mobile development frameworks and tools such as Xamarin, Ionic, and React Native for 3 mobile application development projects: Mobile Offender Risk Assessment, a floorplan navigator application for a public retail, and a professional development application for an IT staffing company.
- Lead and mentor undergraduate and graduate students at different software development, system administration, QA, DevOps, and support roles.
- Advise leadership on technical requirements and project resource needs.
- Conduct Interviews for undergraduate and graduate students of technical and non-technical majors to join the solutions center.
- Responsible for maintenance of all software application in production including usage monitoring, security patching, and scalability.
- Responsible for maintenance and administration of over 80 servers used for housing development, and production applications.
- Advise infrastructure operation team on application needs and updates.
- Advise the School of Information Technology on opportunities for software development and expansion of the solutions center.
- Member of the staff team for the School of Information Technology.
- Research topics related to DevOps, architecture, and software development.
- Present to peers on topics related to state-of-the-art IT solutions' development and maintenance.
- Publish academic papers to local and regional IT related conferences and symposiums.
- Developed and Designed user training workshops, and material on the Offender Risk Assessment and Grant Tracking System developed at ITSC.

[1] *See the project section for further details about the project.*

Cont. Research Associate with Tech Lead duties *July. 18 - Present*

- Implemented Online Offender Risk Assessment and Case Planning System for:
  - the State of Missouri's Department of Corrections.
  - the State of Illinois's Administrative offices of the Illinois Courts.
  - the State of Nebraska Board of Parole.
  - the State of Michigan Department of Health and Human Services.
  - Kansas City Municipal Division.
  - the State of California's Contra Costa County Probation
  - the State of New Jersey's Administrative offices of the Courts.
- Developed and Designed developer training sessions, workshops, and material on the business-to-business integration with the Offender Risk Assessment system.
- Delivered 10 in-person training workshops on the usage of the Offender Risk Assessment and Grant Tracking system to representatives of 81 counties from the state of Ohio.
- Delivered 4 web-based seminars (webinars) on the business-to-business integration with the Offender Risk Assessments System to representatives of:
  - The State of Nebraska Office of the Chief Information Officer and the Board of Parole.
  - The State of Illinois and its counties contracted software vendors.
  - The State of Missouri Department of Corrections.
- Developed scripts in JavaScript and TypeScript to automate the deployment procedure of a multi-layered, service-oriented, distributed software ecosystems.
- Awarded the college's 2019 *"Above and Beyond Professionalism"* Award.

Awarded the School of Information Technology's 2019 *"Distinguished Young Alumni"* Award.

Adjunct Instructor *Aug. 18 - Present*

- Teach the following courses for the ABET accredited Bachelor of Science program in Information Technology.
  - IT2045C - Computer Programming II. (in-person and web-based)
  - IT3049C - Web Game Development. (in-person and web-based)
  - IT5032 - Senior Design Technical Practicum for Networking/Systems Track
  - IT5042 - Senior Design Technical Practicum for Software Application Development Track
  - IT5072 - Senior Design Technical Practicum for Cybersecurity Track
- Develop course material for IT2045C Computer programming II including video lectures, slides, course notes, and assignments.
- Develop course material for IT3049C Web Game Development including video lectures, slides, course notes, and assignments.
- Migrate IT2045C to an online delivery format. Videos can be accessed at https://bit.ly/YG-IT2045-CP2
- Migrate IT3049C to an online delivery format. Videos can be accessed at
- Held office hours for students to provide personalized assistance.
- Grade assignments and provide feedback to students on a weekly basis.
- Collaborate with full time faculty on the course strategy and direction.
- Automated part of the grading process allowing the course to scale and to provide more personalized feedback on the submission.
- Delivered an in-person training to the School of Information Technology Faculty on Staff on the use of GitHub Classroom to bootstrap assignments and automate the grading.

Student Worker/Graduate Assistant with Lead Developer duties *Jan. 18 - Jun. 18*

Spring 18: Part-time/GA
April–July 18: GA/OPT

- Lead the development teams for over seven large-scale projects at the ITSC.
- Lead the development team for a software eco system built for a manufacturing operations consultancy. The eco system consisted of a mobile application built with Ionic 3, a web application built with Angular 5 and backend API built with C# and Asp.Net Core 2.0.

Cont. Student Worker/Graduate Assistant with Lead Developer duties *Jan. 18 - Jun. 18*

- Represented the ITSC in requirement gathering sessions with various clients, including startup companies, government agencies from multiple states, and Fortune 200 retail companies. The sessions include in-person, phone call, and web conferencing.
- Used a distributed software architecture model for deploying a public retail software application ecosystem to optimize the resource sharing and utilization and to improve the system resilience.
- Interviewed new hires for the ITSC co-op positions.
- Designed and built databases for the new projects and solutions.
- Set-up Development and Operations (DevOps) environments and tools such as Continuous Integration/Continuous Deployment (CI/CD) using Drone.io, containerization and provisioning using Docker and Kubernetes, error audit and logging using Sentry for 10+ new projects, applications, and services.
- Researched and implemented software development best practices such as the iterative and incremental software development methodology, agile and test-driven development (TDD).
- Implemented Unit testing for the various components of the projects.
- Trained new developers on best practices and technologies.
- Mentored software developers throughout the lifecycle of the projects.
- Implemented a secure CI/CD pipeline to automate the testing and deployment of the code.
- Administered over 40 application projects and services developed at the ITSC on Linux and Windows platforms.
- Redesigned and restructured the source code's version control model increasing productivity and ensuring faster testing and delivery, and less merge mistakes in the production code.
- Reviewed over 245 code review/merge requests from 20+ projects.
- Wrote scripts using python to convert Statement of Work documents into GitHub milestones and issues.
- Wrote scripts using Python to move GitHub issues between projects.

Presented and published at multiple events, conferences, and journals.

Student Worker with Software Developer Team Lead duties *May. 16 - Dec. 17*

Summer 16: Co-Op
Fall 16: Part-time /GA[2]
Spring 17: Part-time/ GA
Summer 17: Co-Op
Fall 17: Part-time/ GA

- Architected and designed a scalable microservice-based backend services and APIs for a large-scale eco-system responsible for consuming, analyzing, and producing reports on large volumes of data for a Fortune 200 retail enterprise.
- Designed and developed databases for the eco-system on the enterprise management system used by the client, MS SQL.
- Developed and implemented the backend services and APIs for the system using Node.js, Microsoft SQL Server with Machine Learning and R Services, Redis, RabbitMQ, and Docker.
- Developed and implemented R Script and Microsoft SQL Server integration with a web application to execute machine learning analytics, and optimization jobs through the application.
- Architected, designed and developed the frontend tools and services for the eco-system using Angular.js, Bootstrap, and Express.js.
- Lead a team of 4 developers working on multiple applications and aspects of the eco-system.
- Built a cross-platform mobile application using Xamarin and C# to evaluate as a potential candidate for a technology stack for a manufacturing operation consultancy. The work extended into the following position.
- Work independently with minimal supervision to ensure team members meet high quality standards and project deadlines.
- Lead project bi-daily standups to track progress and address architecture and development issues.

[2] GA: Graduate Assistant

Cont. Student Worker with Software Developer Team Lead duties *May. 16 - Dec. 17*

- Coordinated the work and efforts between our team and other development teams consuming the data from our eco-system.
- Participated in client sessions and demos including requirements gathering sessions and progress update briefings.
- Presented the eco-system database design to the client's development team.
- Managed and performed the deployments to the internal development and staging servers.
- Wrote Java Programs and Scripts to explore static IP configurations on Android-based devices.
- Implemented Unit testing for the various components of the projects.
- Developed and mentored other students thorough the process of building a C++ software prototype for Autodesk's Forge Design Automation API. The script parses retail floor plan files and presents them in a format suitable for further processing.
- Deployed and administered software applications on SUSE Linux Servers used as development environments.
- Deployed software applications to the clients' staging and production servers.
- Migrated the data and code of a large-scale software system used by state government agencies from using MongoDB, Express.js, and Node.js v6 to a newer versions and more modern stack of SQL-based database, Restify, and Node.js v8.
- Implemented Unit testing for the various components of the projects.
- Audited web applications for browser compatibility and wrote various scripts using Node.js and Gulp.js task runner to transpile code from the latest JavaScript standards, ECMAScript 6, to a standard that is compliant and supported by web browsers such as Chrome, Firefox, IE11, and Edge.

Automated the audit and correction of the frontend code performance, accessibility, and compatibility issues using Google Lighthouse tools and Gulp.js and automated the minification and optimizing of the web resources and assets (CSS and JavaScript) to boost the loading speed of the web applications.

Student Worker with Web and Software Application Developer Duties *Sept. 15 - Apr. 16*
Fall 15: Part-time
Spring16: Part-time

- Designed a client-server software solution for a Fortune 200 public retail enterprise.
- Developed a client-server software solution for a Fortune 200 retail company responsible for data collection from over 700 business units.
- Designed and developed the database for the solution.
- Participated in client sessions and meetings including requirement gathering and demonstrations.
- Participated in the deployment of the application to the client's servers.
- Wrote scripts using Node.js to setup, build, and auto-populate/seed databases with testing data.

Presentations and Publications

1. Gilany, Y. (2019). Lessons Learned in Implementing Container Technology and Docker to Modernize Legacy Enterprise Applications and Systems. *Presentation to Representatives of the software development and Infrastructure units of the University of Cincinnati*'s IT Division (UCIT).

2. Gilany, Y., ElQuosey, A. & Said, H. (2019). Improving the Efficiency of Releasing and Deploying a Multi-Layered, Service-Oriented, Distributed Software Ecosystem. *University of Cincinnati IT Expo Research Symposium.*

3. Bakare, A., Kunapareddy, V. Gilany, Y. & Said, H. (2019) Integrating FAIR into NIST Framework for Quantitative Risk Assessment of Cyber Threats. *University of Cincinnati IT Expo Research Symposium.*

4. Gilany, Y. & Said, H. (2019) Establishing a DevOps Culture and Practice at the Information Technology Solutions Center: Case Study. *Ohio Higher Education Computing Conference.*

5. Gilany, Y. (June 2019). Web Development and ITSC Technology Stack. *Seminar and Training Workshop to ITSC staff. Cincinnati, OH.*

6. Gilany, Y. (March 8, 2019). OYAS and Grant Tracking System Usage and Features. *Training Workshop to Representatives of 23 state of Ohio counties' Department of Corrections. Van Wert, OH.*

7. Gilany, Y. (March 1, 2019). OYAS and Grant Tracking System Usage and Features. *Training Workshop to Representatives of 21 state of Ohio counties' Department of Corrections. Akron, OH.*

8. Gilany, Y. (February 15, 2019). OYAS and Grant Tracking System Usage and Features. *Training Workshop to Representatives of 22 state of Ohio counties' Department of Corrections. Columbus, OH.*

9. Gilany, Y. (February 8, 2019). OYAS and Grant Tracking System Usage and Features. *Training Workshop to Representatives of 15 state of Ohio counties' Department of Corrections. Columbus, OH.*

10. Gilany, Y. (2019). IT2045C- Computer Programming II. Accessed at: https://bit.ly/YG-IT2045-CP2

11. Gilany, Y. & Said, H. (2018). Automated Reporting System for Funding and Grants for Juvenile Correction Programs. *University of Cincinnati IT Expo Research Symposium.*

12. Gilany, Y. (October 22, 2018). Performing a Business to Business Integration with UCCI's Cloud-Based Offender Risk Assessment Ecosystem. *Presentation and Training Workshop to Representatives of Software Vendors of the State of Illinois and its counties.* Webinar

13. Gilany, Y. (October 22, 2018). Performing a Business to Business Integration with UCCI's Cloud-Based Offender Risk Assessment Ecosystem. *Presentation and Training Workshop to Representatives of the State of Nebraska's Board of Parole and OCIO.* Webinar

14. Kunapareddi, V., Gilany, Y. & Said, H. (2018). An Innovative Solution to Bridge Industry and Student Needs. *Ohio Higher Education Computing Conference.*

15. Gilany, Y. (Feb 24, 2018) Eco-System Backend architecture for a Fortune 500 Public Retail Company. *Accessed at: http://yahya-gilany.com/blog/articles/2018/02/24/Eco-System-Architecture.html*

16. Gilany, Y. (August 19, 2017) Introduction to Machine Learning. *Accessed at: http://yahya-gilany.com/ blog/articles/2017/08/19/Machine-Learning.html*

17. Gilany, Y. (June 17, 2017) Introduction to Design Patterns. *Accessed at: http://yahya-gilany.com/ blog/articles/2017/06/17/Design-Patterns.html*

18. Gilany, Y. (June 6, 2017) Custom Sort Orders using SQL or JavaScript. *Accessed at: http://yahya-gilany.com/blog/articles/2017/06/06/Custom-Sort.html*

19. Gilany, Y. (June 5, 2017) Implementing A Modal Within a Modal in Bootstrap3.0. *Accessed at: http://yahya-gilany.com/blog/articles/2017/06/05/Modal-within-a-modal-bootstrap.html*

20. Gilany, Y. (July 2017) "Can I Use" – Visual Studio Code Extension. *Accessed at: https://marketplace.visualstudio.com/items?itemName=yahya-gilany.vscode-caniuse*

21. Gilany, Y. (July 2017) API Doc – Paw Cloud Extension. *Accessed at: https://paw.cloud/extensions/ApiDocGenerator*

22. Gilany, Y. (June 2017) Terminal Launcher - Visual Studio Code Extension. *Accessed at: https://marketplace.visualstudio.com/items?itemName=yahya-gilany.vscode-terminal-launcher*

23. Gilany, Y. (June 2017) Clock – Visual Studio Code Extension. *Accessed at: https://marketplace.visualstudio.com/items?itemName=yahya-gilany.vscode-clock*

24. Gilany, Y. (April 2017) Pomodoro - Visual Studio Code Extension. *Accessed at: https://marketplace.*

visualstudio.com/items?itemName=yahya-gilany.vscode-pomodoro

25. Gilany, Y. (April 25, 2017) Ecosystem Database Structure Design. *Presentation to Developers, System and Database Administrators of a Fortune 200 public retail company.*

Projects *Further details on the projects are available on my e-portfolio site.

TeamEval *Jun. 2020- Present*

A web application to facilitate peer and self-evaluations in team projects. It is meant to give the instructors an insight into the work dynamics of student teams as well as offer students feedback on how they can be more effective with their teams. It's built with Node.js using TypeScript for the backend and React.js using JavaScript for the frontend.

Student Success System (SSS) / Student 360 *Aug. 2020 - (hold)*

A student-centric system to help students navigate and succussed in college life with all of its aspects, including academic success, financial and health wellness, professional success, ...etc. Student 360 is web application to digitize and automate the program. It's built with Node.js using TypeScript for the backend and React.js using JavaScript for the frontend and will integrate with the Canvas Learning Management System to extract relevant information.

Virtual Events as a Service Platform (VEaaS) *Mar. 2020 - May 20*

VEaaS was built to host the annual event of the University of Cincinnati's School of Information Technology IT Expo in the wake of the COVID-19 Pandemic were in-person events had to be cancelled. The developed platform included a main stage where the live keynote speeches and closing ceremonies were streamed and many breakout rooms to showcase senior design projects, high school competition, research symposium, and industry sponsors. The event can be found here: https://itexpo20.live. The platform was repurposed for the University of Cincinnati Department of Political Science to host a graduation ceremony for their graduates. The event can be found here: https://poliscinexus20.live. The platform was built using React and hosted on Netlify's cloud service.

Square Footage and Floor Plan Collection Integrated Workflow *Feb. 2018 - Present*

An enhanced version of the Square Footage Collection application developed for a Fortune 200 public retail company. It eliminates the need for form data entry and replaces it with an integrated cloud-based floor plan. The online floor plans system enforces many business rules and requirements and enforces consistency between the stores floor plans and the square footage data collected for financial analysis. The system is built as part of a larger suite of application integrating many business units at the corporation with integrity and accuracy. The application allows vendors, store managers and architects to collaborate on one platform. The system is built using Node.js, Express.js and Restify for the backend services and microservices, and JQuery for the frontend needs until it was replaced with Vue.js as frontend framework. The system also adopts and integrates with the Autodesk Forge Developer Platform.

Eco-System for a Fortune 200 Public Retail Company *Sept. 2016 - Present*

An Eco-System consisting of 6 applications (Web, Mobile, AR, VR) interfacing with a RESTful gateway API developed in a microservice architecture.
The system consists of 11+ microservices communicating with different services and tools such as Microsoft SQL Server, Redis, R server, Reporting Services, Active Directory, etc. As the lead developer on the project, I:

- Architected, and designed the backend services and APIs.
- Designed and developed the database which consisted of 50+ tables and views and 300+ queries.
- Maintained and reviewed the code to ensure quality.
- Mentored and coordinated between the development teams working on the

projects supported by the eco-system.
- Automated the testing and deployment of the project using Drone.io.

Beyond Analytics/ Strategic Planning Application *Sept. 16 - Jan. 2019*

A web application built as part of the eco-system for a Fortune 200 public retail company to serve as a playground for data analysts to investigate and improve their businesses. It is built using Node.js, and AngularJS. The application is packaged with machine learning and data analytics algorithms developed using R programming language and integrated into the system using the SQL Server Machine Learning and R services.

Lean-Manufacturing Solutions *Dec. 17 – Aug. 2018*

A system to implement Lean processes in food manufacturing systems and factories. The solution is a client-server solution consisting of a cross-platform mobile application built using the Ionic3 platform and the TypeScript language, a web application built using angular5 framework and the TypeScript language, and a Gateway API built using C# and Asp.Net Core 2.0 Framework. As the lead developer, I architected the solution, and initialized the development of the web and API projects for the development team to adopt. I also trained and mentored the software developers on the technologies used, set up the CI/CD pipelines, and managed the deployments.

Square Footage Collection Application v 1.0 *Sept.2015-Aug. 16*

A data collection web application developed for a Fortune 200 public retail company with rigorous business rules and requirements. Built initially as a Monolith application in a client-server architecture, then decomposed and refactored to be part of the Eco-system described below. The system was built with Node.js and jQuery.

CanSat *Feb. 2015 -Apr. 15*

An Educational Nanosatellite project that utilizes various sensors, actuators, transmitters, and receivers. It consists of two Microcontrollers communicating with radio transmissions from the satellite to a ground station. The satellite collects temperature, humidity, pressure, geolocation, acceleration and orientation measurements, stores them onto an SD card, and then sends them to the ground station where data is processed and visualized in a dashboard built with LabVIEW. A PCB board was designed and manufactured to electrically connect the sensors and electric components of the device. The components used include Atmega328, MPU-6050 (Accelerometer and Gyroscope sensor), BMP085 (pressure sensor), DHT11 (humidity and temperature sensor), RF or Xbee (for wireless communication through UART protocol), and GPS Module.

Dragon Shooter – Augmented Reality (AR) Game AR *Feb. 2017 - Apr. 17*

A project developed for IT 7031C-Advanced Technologies for Game Development class. It is built using C# on the Unity Game Engine to provide an interactive game environment where a player can see and fight flying dragons in their real setting.

Pomodoro - Visual Studio Code Extension *April, 2017*

A productivity/time-management tool developed for Visual Studio Code to help developers stay on task and be more efficient. It is a personal open-source project, built with TypeScript and Node.js. It is adopted and downloaded 11k+ times.

Terminal Launcher - Visual Studio Code Extension *March, 2017*

A developer productivity tool to configure Visual Studio Code Integrated Terminal windows for different projects. The tool is a personal open-source project built with TypeScript and Node.js. It is adopted and downloaded 2900+ times.

Can I Use - Visual Studio Code Extension *April, 2017*

A developer tool that provides an easily accessible up-to-date browser support tables of frontend technologies on desktop and mobile web browsers. Users gets access to the resource from their integrated development environment (IDE) or code editor. The extension was adopted and downloaded 700+ times.

API Doc Generator – Paw Cloud Extension *July, 2017*

A productivity tool for developers who use the *Paw* HTTP Client application to test web services. The extension allows users to automatically generate JavaScript API documentation in the apiDoc format, based on the parameters passed and the results received from the API being request. The platform doesn't show download metrics of the extension.

Smart-Home Embedded Systems project *August 2014*

An Embedded Software and Systems Diploma's capstone project from the Syndicate of Engineers in Egypt. The system users two Atmega16 AVR micro-controllers. Users are authenticated using a passcode stored in an external EEPROM and interfaced through I2C Protocol. The system controls multiple lights and motors through Pulse-Width Modulation (PWM) controlling electric window blinds and doors. The system protocols and libraries were implemented using C and C++ programming languages.

Trainings, Courses and Conferences Attended

Trainings

CanSat Training Program at the Space Systems and Technology Laboratory (SSTLab).	*84 Hours*
Embedded Systems Software Diploma, Certified.	*170 Hours*
Entrepreneurial Development Skills Program.	*60 Hours*
SEI Software Architecture Professional from Carnegie Mellon University's Software Engineering Institute	*In-progress*

Conferences Attended

O'Reilly Open Source Convention (OSCON) – July 2019	*5 Days*
Ohio Higher Education Computing Council (OHHEC) – May 2019.	
O'Reilly Open Source Convention (OSCON) – July 2018.	*5 Days*
Ohio Higher Education Computing Council (OHHEC) – May 2018.	
O'Reilly Open Source Convention (OSCON) – May 2017.	*5 Days*
Microsoft Tech Summit – Jan 2017.	*2 Days*

Online Courses

- Machine Learning (Stanford University through Coursera), Certified.
- Project Management (udemy.com), Certified.
- Programming Foundations: Programming.
- Programming Foundations: Object-Oriented Design.
- Programming Foundations: Database.
- Angular 2 Essential Training.
- Foundation of Cloud Architecture.

Achievements

- Awarded the 2021 School of Information Technology **"Outstanding Service Award".**
- Awarded the 2019 School of Information Technology's "**Distinguished Young Alumni Award".**
- Awarded the 2019 University of Cincinnati's College of Education, Criminal Justice, and Human Services **"Above and Beyond Professionalism"** Award.
- University of Cincinnati | CECH **| Dean's List 4.0 GPA** (Spring 16, Fall 16, Spring 17, Fall 17, Spring 18)
- Awarded the University of Cincinnati **Global Scholarship**
- Awarded the UC's School of Information Technology **Graduate Assistantship**.
- **Outstanding Student** Award from the Learning Center for Applied Technology (LCAT) 2011.
- The United States **President's Volunteer Service Award** in 2011.
- **Outstanding Volunteer Service Award** in 2011 from the United States Department of State.

Activities

Kapolei Robotics Team (Team 2445) *2010-11*

Programming team

Space Systems Technology Laboratory (SSTLab), Egypt *Dec. 14 – Aug. 15*
Member of the CubeSat research Team.
Participant in the CanSat Training Program.
CanSat Design-Build-Launch Competition
- Responsible for the CanSat's On-Board processors and programming

Student Government *2012-13*
Faculty of Engineering, Cairo University

Legislative Internship Program in Hawaii State Senate *December 2010*
Worked as an Assistant to the Representative Sharon Har of the State of Hawaii.

Better Understanding for Better World (BUBW) *December 2010*
Cultural and Religious Tolerance and Dialogue program.

Department of State Alumni Connect *November 2013*
Experiential Team Building Training at the US Embassy in Cairo, Egypt.