

Aaron Blaine Dorsey-Hines, CTFL

aaron@engineer.com

(202) 506-9778

EDUCATION

11/2022 - 04/2023 **Massachusetts Institute of Technology, Cambridge, MA**

- Certificate of Successful Completion of Applied Data Science Program awarded by MIT Professional Education.

08/2022 - 12/2022 **Massachusetts Institute of Technology, Cambridge, MA**

- Certificate of Successful Completion of Data Science and Machine Learning: Making Data-Driven Decisions awarded by MIT Schwarzman College of Computing.

08/2002 - 12/2003 **New Jersey Institute of Technology/Rutgers University, Newark, NJ**

- Coursework towards a Bachelor of Science in Mechanical Engineering.
- Coursework included humanities subjects taught at Rutgers University.

10/2000 - 06/2002 **Paul Laurence Dunbar Pre-Engineering Senior High School, Washington, DC**

- Diploma June 2002. Coursework included robotics, Cisco Networking, Drafting, AutoCAD, and Web Design.

SECURITY CLEARANCE

Active DoJ Top Secret with CI Polygraph

SKILLS & EXPERIENCE

Libraries & Frameworks:	Programming Languages:	Technologies & Methodologies:
• .NET 8, ASP.NET	• C++, C#, Python, Java	• OpenAI, Microsoft Azure, Amazon AWS, Google API, Firebase, OSINT, HUMINT, SIGINT, CCTV, VSS
• React, React-Native, Automator, Selenium	• Arduino, ASN.1, mSL	• Artificial Intelligence, Machine Learning, Predictive Analytics, Nintendo WiiU Accelerometer and Gyroscope Motion Controls
• Node, jQuery, Unity3D, Photon, Roblox	• HTML, CSS, JavaScript	• Deep Learning, Recommendation Systems, , Large Language Models, Neural Networks
• Redis, NGINX, Electron	• Keyhole Markup Language	• Microsoft Visual Studios, Azure, Microsoft SQL Server, Manifest v2 and v3 Web Browser Extensions.
• Redux, RaspberryPI	• SQL, VB.NET, Bash, Powershell, Windows Scripting	• Application and services development for Windows, macOS, Android, and iOS operating systems.
• OAuth, Parcel, Yarn, SignalR, Websockets, Windows Communication Foundation	• Perl, PHP, LaTeX, Markdown	• Relational Database Management Systems, Cryptography, Telephony, Cloud Architecture Environments, Active Directory Federated Services

WORK EXPERIENCE

12/2012 - (Present) NETRIDER LLC, Woodbridge, VA

Programmer

- Develop C# and JavaScript based console games for the Nintendo Switch and WiiU.
- Develop Java based software for Android phones, tablets, Android TV, and Google Glass.
- Teach Unity3d Game Development over Twitch stream with about 100 daily unique views and 2,000 total unique views.

04/2024 - 07/2025 American Systems, Chantilly, VA

Software Engineer III, Lead

- Designed and developed data-driven network video technology systems using C# and Python to provide innovative solutions that enhance intelligence and security for law enforcement operations.
- Customized commercial off-the-shelf (COTS) products to enhance functionality beyond the original vendor's offerings. Integrated these solutions with complex existing systems and addressed specific requirements to effectively mitigate current and emerging risks through innovative technology.
- Developed actionable insights from combining video data of cameras and sensors with customized digital video management application services and analytics.
- Provided technical leadership and production support for digital video management software for reliable and scalable solutions.

10/2021 - 03/2024 Tridea Works LLC, Vienna, VA

Software Engineer

- Developed HUMINT, OSINT, and SIGINT applications for local, state, and federal law enforcement.
- Developed C# and Javascript based applications for the web, Windows, MacOS and Linux platforms.
- Developed Javascript based web-extensions for Apple Safari, Microsoft Edge, Mozilla Firefox and Google Chrome.
- Applied data science and machine learning to create solutions for data-driven decision making.

01/2014-01/2017 Global Connections to Employment, Lorton, VA

QA Automation Engineer II

- Engineered and implemented Groovy/Java based framework using selenium for test automation.
- Developed and maintained ASP.NET C# web application for the company's time activity reporting system.

01/2013-04/2013 Hewlett Packard, Landstuhl, Germany

Mobile Web Application Developer

- Created mobile and web based solutions to support collaborations among USAFE-AFAFRICA (NATO) installations, Interpol, MI6, and other law enforcement officials.
- Migrated internal ASP web application (WebTool) to Windows Server 2012 utilizing IIS7 and Oracle 11g.

01/2007-12/2013 Hewlett Packard, Alexandria, VA

Software Engineer in Test

- Architected keyword and data driven automated testware solutions for reducing the costs of the equivalent manual test effort.
- Designed, developed, and distributed framework for maximizing the equivalent manual test effort for web and client-based applications and barcodes.
- Upgraded and installed government donated resources (computers, monitors, switches, etc) for the student computer labs.
- Designed, implemented, and maintained a computer lab for upper-classmen.

01/2006-01/2007 Hewlett Packard, Alexandria, VA

Quality Assurance Analyst

- Analyzed functional specifications documents to assist team in creating test data, test cases, and test scripts for functional, interface and system testing.
- Responsible for writing detail test requirements, executing functional tests, manipulating data on front and back-end system, and communicating progress with team members.

04/2005-01/2006 Hewlett Packard, Alexandria, VA

Information Analyst

- Performed visitations to end users of the highest priority to discuss and resolve communications, hardware, and software related issues.
- Coordinated with different DoD communications offices (NMCI, NGB, and NAVRes) to ensure proper firewall and LAN configuration prior to new workstation deployment or workstation relocation.

06/2004-12/2004 Fairfield Language Technologies, McLean, VA

Rosetta Stone, Software Sales Associate

- Aggressively sold immersion-based language learning interactive software to home, business, and government consumers.
- Demonstrated use, functionality, and benefits of the software.
- Developed and implemented aggressive sales strategies to become a regional sales leader.
- Managed and reported weekly inventory to District Manager.

06/2002–09/2002 Delon Hampton & Associates, Washington, DC

Computer Aided Drafting Technician

- Digitized hand drafted sewer maps of Washington DC using AutoCAD 2002/2004.
- Worked with team of engineers to determine different elevations and dimensions of piping used in the maps to create a 3D model of the DC sewer system based on CAD drafts.

10/2000–06/2002 Naval Sea Systems Command, Naval Surface Warfare Center, Washington, DC

Engineering Aid

- Aided with collecting data from experiments at Naval Surface Warfare Center's Carderock Materials laboratories.
- Gathered and extracted data from experiment reports and compiled into database.
- Performed basic clerical administrative tasks.

**06/2000–09/2000 Walter Reed Army Institute of Research, Forest Glenn,
MD**

Apprentice

- Awarded participation in Polymerase Chain Reaction (PCR) Cloning research sponsored by the George Washington University by demonstration of excellence in metropolitan Science Fair.
- Trained by molecular biologists to investigate the benefits of data gathered from the Human Genome Project.

**10/2000–06/2002 Paul Laurence Dunbar Pre-Engineering Academy,
Washington, DC**

Network Administrator

- Volunteered to maintain the student and faculty domain access.
- Troubleshoot issues that ran the gamut from networking problems (ex: IP conflict) to hardware failures (ex:penny stuck in floppy drive).
- Upgraded and installed government donated resources (computers, monitors, switches, etc) for the student computer labs.
- Designed, implemented, and maintained a computer lab for upper-classmen.

ADDITIONAL INFORMATION

- Once on CSPAN-TV for Child Safety on the Internet discussion panel shows.
- Once interviewed in Time Magazine for featured story regarding child hackers.
- Volunteered to Lecture and workshop Game Creation at NOVA Community College for the charity Future Kings.
- Closed genes in Human Genome project using the PCR cloning method as an apprentice at Walter Reed Army Institute of Research for George Washington University.

MEMBERSHIPS

- MIT PE Applied Data Science Program Alumni
- Girl Scouts of America
- International Game Developers Association
- Internet Society
- International Software Testing Qualifications Board
- International Virtual Assistants Association
- National Notary Association



THIS IS TO CERTIFY THAT
AARON DORSEY-HINES
HAS SUCCESSFULLY COMPLETED
**DATA SCIENCE AND MACHINE LEARNING: MAKING
DATA-DRIVEN DECISIONS**

November, 2022



MASSACHUSETTS
INSTITUTE OF
TECHNOLOGY



A handwritten signature in black ink, appearing to read 'M. Dahleh'.

Munther Dahleh

Professor and Director of the Institute for Data, Systems, and Society (IDSS) at MIT

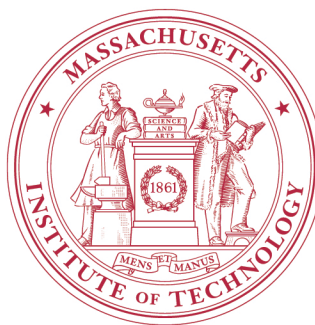


PROFESSIONAL EDUCATION



This is to certify that

Aaron Blaine Dorsey-Hines



has successfully completed

Applied Data Science Program

November 5, 2022 - February 12, 2023

A handwritten signature in dark ink, appearing to read 'M. Dahleh'.

Munther Dahleh
Course Director
Massachusetts Institute of Technology

A handwritten signature in dark ink, appearing to read 'Bhaskar Pant'.

Bhaskar Pant
Executive Director
MIT Professional Education