

Abdelilah Hanim

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EDUCATION

B.S. Mechanical Engineering; B.A. Computer Science

Aug. 2023 – May 2028

Virginia Commonwealth University (GPA: 3.4)

Richmond, VA

– Dean's List & Dean's Scholarship Recipient (2023 – Present)

TECHNICAL SKILLS

Design & Engineering Tools: AutoCAD, SolidWorks, Blender, 3D Printing, Prototyping

Industrial & Manufacturing Engineering: IE Fundamentals, Spatial Layout & Process Path Design, Sub-System to Engineering Requirements Translation, Material Handling & Processing, Lean Manufacturing, Six Sigma

Engineering Systems: HVAC Systems, Commercial & Industrial Mechanical and Power Systems, Thermodynamics, Fluid Dynamics

Programming & Software: Python, Java, C++, HTML, Microsoft Office, AWS, DevOps principles, Linux/Unix administration, Virtualization, Relational & NoSQL Databases, Networking, Security, Storage, Data Analysis, Scripting, Automation, Foundational ML concepts, calculation & data processing tools

Operations & Analysis: Data Analysis, Technical Documentation, Research, Analytical & Problem-Solving Skills

Interpersonal & Workplace: Customer Service, Time Management, Process Improvement, Team Collaboration

Certifications: HCP BLS - CPR, AED, First Aid (Cert. #1090-17090568)

EXPERIENCE

Area Manager Intern

Jun. 2026 – Aug. 2026

Amazon

Chester, VA

- Converted sub-system functional requirements into engineering requirements and component designs to redesign and relocate an existing process, reducing utilized space by 60%+ while maintaining full volume throughput and enabling 300K+ units of potential additional monthly capacity for future site expansion.
- Applied IE fundamentals, including spatial layouts of processing lines and process paths, delivering the majority of proposed changes within a 10-week internship while coordinating across Operations, Engineering, Safety, Maintenance, and Facilities.
- Identified \$2M+ in projected annual value through cost-benefit and operational analysis of increased capacity, labor efficiencies, material handling, and process improvements.
- Built a real-time operational dashboard to translate live data into actionable guidance for floor-level capacity decisions (see Projects).

Licensing Specialist

Jan. 2025 – Present

VA Dept. of Professional & Occupational Regulation (DPOR)

Glen Allen, VA

- Process 100+ licensure/certification applications weekly with <1% error rate; independently evaluate eligibility and issue determinations based on Virginia regulations.
- Maintain detailed records in the EAGLES system for 10+ boards; coordinate escalated cases with internal teams and external agencies under strict deadlines.

Avionics Recovery Lead

Aug. 2025 – Present

Ram Rocketry at VCU

Richmond, VA

- Lead the Recovery sub-team, CAD modeling the recovery bay and electronics holders in SolidWorks and integrating dual-deploy altimeters, key-switch systems, and GPS modules.
- Coordinate with Payload, Structures, and Propulsion teams under competition constraints; spearheaded redundancy improvements via additional altimeter/GPS systems and mentor teammates on electronics integration.

PROJECTS

Electric Go-Kart Suspension & Braking System | SolidWorks, Testing

Jan. 2025 – Present

- Designed and built a double-wishbone suspension in SolidWorks; reduced steering play by ~20% under driver load.
- Installed hydraulic disc brakes, shortening stopping distance by ~8 ft at 20 mph during test runs.
- Completed 30+ hours of testing and adjustments, improving handling consistency and braking reliability.

Gesture-Controlled Tracking Drone | Python, Computer Vision, Control Systems

Jan. 2024 – Present

- Designed a drone navigated via real-time hand gestures using camera-based tracking; achieved 90%+ gesture recognition accuracy.
- Programmed obstacle avoidance algorithms, enabling autonomous rerouting within 1-meter proximity.

HIVE: AI Knowledge Retrieval Tool | Python, AWS Bedrock, Claude, RAG

Jun. 2026 – Aug. 2026

- Built a Retrieval-Augmented Generation (RAG) tool to unify operational knowledge scattered across wikis, Slack threads, and runbooks into one natural-language query interface for fulfillment center associates.
- Won the People's Choice Award at Amazon's 2026 Global AI Solutions Expo, selected from 4,350+ votes cast across all intern submissions.

Operational Visibility Dashboard | Python, Grafana Integration

Jun. 2026 – Aug. 2026

- Built a Python dashboard consolidating live Grafana sorter feeds into one interface refreshing every 10 seconds, with flex-capacity model recommendations built into the UI.