

Dawood Ghauri

📍 New York, NY ✉ contact@dghauri.io 🔗 dghauri.io 🌐 dghauri0 in dawood-g 📞 0009-0000-9085-3362

Education

- M.S. New York University, Tandon School of Engineering**, Computer Engineering
• Cumulative GPA - 3.73
Brooklyn, NY
Sep 2023 - May 2025
- B.S. Iowa State University**, Computer Engineering
• Physics minor
• Major GPA - 3.92; cumulative GPA - 3.85
Ames, IA
Aug 2019 - Dec 2022
- A.S. Scott Community College**, Pre-Engineering Concentration
• Cumulative GPA - 3.84
Riverdale, IA
Aug 2016 - May 2019

Experience

- Manhattan School of Music**, Network Systems Engineer
• Enable distributed musical performance and collaboration by maintaining a specialized, high-speed research network designed for ultra-low-latency communication.
• Architect practical, budget-conscious infrastructure solutions that expand the technical capabilities of the Orto Center.
• Ensure reliable delivery of hybrid and remote education through integrated A/V and distance-learning systems.
• Partner with academic stakeholders to enhance digital learning platforms, leveraging automation and system integrations to improve efficiency and user experience.
New York, NY
Feb 2026 - Present
- New York University, Integrated Design & Media Lab**, Defining Accessibility within AR/XR
• Explored creative methodologies for designing artificial-reality tools for people with disabilities.
• Created Unity environments to support navigation of the New York City subway system.
• Compared the accessibility of Meta Quest headsets and Apple Vision Pro using W3C, Meta, and game-accessibility guidelines.
Brooklyn, NY
Jan 2024 - May 2024
- PrairieOaks LLC**, Network Engineer Intern
• Designed a LAN with fiber-optic distribution to staging-location endpoints.
• Deployed site-to-site wireless networking for WWOOF and HelpX locations using Ubiquiti and MikroTik equipment.
• Deployed an on-site NVR and IP-camera security system.
• Created equipment and labor budgets totaling \$30,000 across four properties.
• Completed summer internships in 2020 and 2021, then continued post-graduation expansion work.
LeClaire, IA
Jul 2020 - Aug 2023
- Wu Tsai Institute, Yale University**, Undergraduate Summer Research Intern
• Processed images from the dorsal lateral geniculate nucleus of the mouse visual thalamus.
• Developed a computational framework for neuron identification and segmentation.
• Used convolutional neural networks to increase mean F1 accuracy by 15 percent across regions of interest.
New Haven, CT
Jun 2022 - Aug 2022
- Iowa State University, Department of Electrical and Computer Engineering**, Undergraduate Teaching Assistant
• Led laboratory exercises for Computer Organization and Assembly-Level Programming over two semesters.
• Supported a final project implementing a MIPS-compliant processor with a five-stage pipeline.
• Helped maintain a cycle-accurate, directed-test verification platform and updated course documentation and assessments.
Ames, IA
Aug 2021 - May 2022
- Iowa State University**, NCORE-ISCORE Project Scholar
• Attended the National Conference on Race and Ethnicity and studied performative activism and allyship in individuals, organizations, and institutions.
• Analyzed institutional policies and proposed actionable solutions for Iowa State's Conference on Race and Ethnicity.
Ames, IA
Mar 2021 - Mar 2022

Scott Community College, Department of Mathematics and Academic Support Center,
Supplemental Instruction Leader and Peer Tutor

Riverdale, IA
Jan 2018 - Jul 2019

- Led one-on-one and group tutoring sessions in calculus, physics, and chemistry.
- Adapted pedagogical methods to individual learning needs and received positive student feedback reporting improved grades.

Volunteer

International House, President, Resident Council

New York, NY
Sep 2025 - May 2026

- Led a 16-person team to resolve resident concerns efficiently, equitably, and transparently.
- Bridged communication gaps and advised leadership on strategic, actionable solutions.
- Built transparency and communication resources at ihnyc-rc.org.

Publications

Coordination of distinct sources of excitatory inputs enhances motion selectivity in the mouse visual thalamus

Jan 2025

Fei Y, Luh M, Ontiri A, Ghauri D, Hu W, Liang L
doi.org/10.1101/2025.01.08.631826

Honors and Awards

Brenda Jones Change Agent Award

Mar 2023

Iowa State University

Dean's Student Leadership Award

Mar 2022

Iowa State University

Ronald E. McNair Postbaccalaureate Achievement Program Scholar

Aug 2020

Iowa State University

Jack Kent Cooke Transfer Scholarship Semifinalist

Jan 2019

Scott Community College

Professional Memberships

- **Tau Beta Pi, Iowa Alpha Chapter** - member since February 2021
- **IEEE-HKN, Nu Chapter** - member since February 2021
- **College of Engineering Dean's List** - Fall 2019 through Fall 2022
- **Future Engineers Club President, Scott Community College** - August 2017 through July 2019

Skills

Programming Languages: C, C++, Java, Python, VHDL, Verilog, MIPS and ARM assembly, JavaScript, HTML, MATLAB

Frameworks and Libraries: Spring Boot, Flask, BERT and CAMELBERT, Mockito, TensorFlow, PyTorch, PySpark, Volley, Highcharts

Databases and Cloud: MongoDB, MySQL, SQL Server, AWS S3, Azure

Hardware and Development Tools: Ghidra, ChipWhisperer, STM32, Cadence, LTspice, NYUSIM, eFabless Open MPW, ModelSim and QuestaSim, Verilator, Intel Quartus Prime

Practices and Platforms: Git, Agile, CI/CD, Docker, Unix, PowerShell, Power analysis, ASIC design, Unity

Languages

English: Native

Urdu: Native

German: Beginner