ALEK N. TURKMEN

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EDUCATION

The Cooper Union, Albert Nerken School of Engineering

New York, NY

Bachelor of Engineering, Mechanical Engineering, Economic and Public Policy Minor, GPA: 3.3/4.0 August 2021 - May 2025

• Half Tuition Scholarship (4 years), Cooper Union Merit Grant (4 years), ACE Mentor Scholarship (4 years)

Manhasset High School

Manhasset, NY

High School Diploma, GPA: 3.9/4.0 | ACT: 34

August 2017 - June 2021

• Regents Diploma with Advanced Designation & Honors Math and Science, High Honor Roll (all 8 semesters)

PROFESSIONAL EXPERIENCE

Northrop Grumman

Baltimore, MD

Manufacturing Engineer Intern (10 weeks)

May 2023 - August 2023

- Developed production assemblies of high-quality mission-critical systems for AMEC, SMT and automated feed factory
- Implemented optical character recognition for manufacturing RPA, utilizing 3D AOI systems and Microsoft AI Builder
- Employed Excel and MATLAB for high-quality output of organic/ceramic microelectronic packages, bare chip/wire assemblies, and hermetic sealing; improving processes, product integrity, and longevity, while eliminating defects
- Comprehensive quality analysis using, lean manufacturing, 6sigma, capability study, GR&R, and ANOVA methodologies

Loisaida Inc.

New York, NY

Remote Sensing IoT Technician

September 2022 - Present

- Designed and constructed custom 3D printed enclosure of portable multi-sensor device to analyze residential building
 environments performing systematic testing to ensure durability, strength, and resistance to UV and water degradation
- Tested enclosure to perform at environmental operating limits (humidity, temperature, particulate matter accumulation)
- Skilled 3D printer, knowledgeable in Inventor, OnShape, CNC machining with VCarve and SOLIDWORKS

Jaros, Baum & Bolles

New York, NY

HVAC Summer Intern (10 weeks)

June 2022 - August 2022

- Designed 5 Tenant fit-out projects using Revit (BIM) with limited supervision including 540 Madison, One Bryant Park, OWTC, Hallet Towers and completed specific tasks on building/infrastructure upgrades; schedules, and floor plans
- Reviewed shop drawings, construction documents, construction administration of RFIs & client submittals, and performed
 3 site visits and punch-lists with limited supervision to verify that designs and specifications were implemented accurately
- Planned and coordinated routing of major distribution, main equipment rooms, risers, and commercial/residential spaces
- Led design tasks that support the overall trade system (branch circuiting, ductwork distribution, piping distribution, latent and sensible heat load calculations, static air pressure calculations, equipment selection and sizing, sustainability analysis)

LEADERSHIP AND EXTRACURRICULAR ACTIVITIES

The ACE Mentor Program of Greater NY

New York, NY

Alumni & Civil Engineer & Lead Architect

October 2019 - Present

- Currently ACE Mentor Alumni, regularly attends and presents information in alumni internship and college info webinars
- Explored fundamentals of civil/structural engineering, MEP, and construction management from industry professionals
- Worked toward a final project, introduced to careers, industry vocabulary, and roles companies play in the ACE industry

The Cooper Union Motorsports Team

New York, NY

Chassis subsystem member

September 2021 - Present

- Collaboratively worked to conceive, design, and fabricate a formula-style car, to compete in national events (FSAE)
- Worked with car chassis to test statics and dynamics functionality (torque calibration rig, adhesion jig, firewall designs)

Engineering Student Council & Joint Student Council, The Cooper Union

New York, NY

Treasurer & ME Class of 2025 Representative

September 2021 - Present

- Represents, advocates, and takes actions for the best interests of student body at the Albert Nerken School of Engineering
- Organized and managed \$1000 semesterly budget, including finals week Mid-Night Breakfast and fundraising events

TAMID at The Cooper Union

New York, NY

Investment Fund Member

September 2021 - May 2022

• Conducted equity research, managed stock portfolio, presented a slide stock pitch with 5 teammates about Apple Inc.

Alpha Epsilon Pi, New York University

New York, NY

Executive Board Member & Social Chair & New Member Chair

January 2022 - Present

• Managed and distributed a yearly budget of \$80,000, organizing 30+ philanthropic, social, and new member events yearly

SKILLS & INTERESTS

Skills: Autodesk AutoCAD, Revit & Inventor, SOLIDWORKS, MATLAB, NX/Siemens, Bluebeam, OnShape, VCarve **Interests:** New York Rangers, Astrophysics, Car Repairs, Stock Trading, Computer Assembly, Power-Lifting, Avid Reader