Kevin Chen | Projects & Portfolio
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Space Exploration Technologies Corp.
1 Rocket Road Hawthorne, CA 90250 United States

To whom it may concern,

My name is Kevin Chen and I am a junior attending Northwestern University's School of Engineering. I am studying Mechanical Engineering and minoring in Environmental Policy and Data Science. It thoroughly excites me to apply for a 2023 engineering internship at SpaceX.

My generation was fortunate enough to not only see the conclusion of the shuttle-era, but the rise of commercial spaceflight. I was captivated by these pioneers who reignited a desire to explore the stars. Carefully tracking the countless achievements and continuous defiance of expectations, I've watched in awe, waiting for my chance to tackle these impossible challenges. It is for this reason that I am dedicated to making life multiplanetary in a sustainable manner, and I believe SpaceX provides the greatest opportunity to do so.

A successful engineer must not only have an affinity for the field, but also possess resourcefulness and an understanding of team dynamics.

- As the youngest intern accepted into the 2022 NASA Academy class, I collaborated with the structural dynamics department. During this program, I tackled several projects, including the ACS3 solar sail cubesat launching in early 2023, testing of the Mars Sample Return reentry demonstration unit, and the design and evaluation of crushable composite-hybrid energy absorbers in VTOL aircraft. Through these affairs, I strengthened my grasp of aerospace design, manufacturing, and materials selection.

- My 3 years of experience in VEX Robotics have armed me with a robust manufacturing skillset. In VEX, I took on the role of our main chassis assembler and lead designer. Additionally, I gained substantial experience in PID control loops, odometry, inertial sensors, and pneumatics, while also leveraging my knowledge in mechanical design and building techniques. This expertise led our team to claim numerous international titles.

- Last summer, I secured a position as a Materials Science research assistant where I designed and developed biaxial test frames to perform fracture analysis on carbon-fiber composites. This opportunity allowed me to hone my skills in SOLIDWORKS, stress analysis through Abaqus CAE, and also gain certification for operating conventional and CNC shop machinery. Further publications are pending as well.

While I am confident that my previous experience will allow me to hit the ground running at SpaceX, I recognize the need to embrace adaptability and perseverance, the same qualities that launched Falcon-1. Thank you for your consideration and I look forward to hearing from you soon. Please contact me at KevinChen2024@u.northwestern.edu or (317)-523-0206.

Sincerely,

Kevin Chen