James King

Watertown, NY | 315-921-8281 | james.king.usa2@gmail.com | linkedin.com/in/jamesk2 | British-American dual citizen

EDUCATION

Cornell University

Ithaca, NY

Bachelor of Science Degree in Mechanical Engineering | Minor in Business

Anticipated May 2028

Relevant Coursework: Thermodynamics | Statics | Electromagnetism | Differential Equations | Python for Engineers | Linear Algebra | Mechanical Synthesis | Dynamics |

South Jefferson High School

Adams, NY

Memberships: Founder, Rubik's Cube Club | President, Adams Library Community Club | Co-President, SADD

ENGINEERING EXPERIENCE

Cornell Racing Formula SAE (Society of Automotive Engineers)

Ithaca, NY

Ergonomics Subteam / Part Designer

Nov 2024 - Present

- Engineering the 2026 steering wheel with emphasis on structural optimization, performing three-point bend testing to minimize weight while maintaining stiffness and driver feedback.
- Integrating 3D driver hand scans into grip design and applying carbon fiber layup techniques to fabricate ergonomic, lightweight grips.
- Conducted thermal conductivity testing of proprietary brake pads, generating data that validated material selection and strengthened the team's design competition results.
- Developed hands-on expertise in CAD modeling, machining, composites, and experimental validation, collaborating with a 50+ member team in a full design-to-manufacture cycle.

Shaw Harbor Holdings

Adams, NY

Mechanical Engineering Intern

June 2024 - August 2025

- Co-led the design and development of new enclosure prototypes at Skip-Line LLC., creating detailed CAD
 models and assemblies that reduced tariff costs and accelerated manufacturing by standardizing enclosure
 components across product lines.
- Designed and modeled CAD laser fixtures for manufacturing, reducing machine downtime by 25% and improving production efficiency.
- Researched Non-Recurring Engineering (NRE) rates to provide data-driven recommendations that resulted in a new pricing structure, optimizing engineer time and company profitability.
- Evaluated AI tools and presented adoption strategies to executive leadership, leading to implementation.
- Mentored by the CEO and other executives, gaining broad insight into operational management, engineering processes, and business strategy.

ACTIVITIES

CORE (Club of Rural Engineers)

Ithaca, NY

Member / Mentor

Sept 2024 - Present

- Attending student conventions and participating on a student board to grow and encourage rural applicants to look beyond the horizon of their town and emphasize the strengths they bring.
- Providing direction for incoming rural students to college, and building the community to help provide more resources for rural students.

Engineering Dean's Advisory Council (EDAC)

Ithaca, NY

Member

Sept 2025 - Present

• Appointed by Admissions to serve as an undergraduate representative on the Engineering Dean's Advisory Council, shaping academic policies and guiding initiatives to enhance student engagement.

ADDITIONAL

Skills: CAD (Inventor/OnShape) | Thermal Testing | Machining (Mill, Lathe, CNC) | 3D Printing | Carbon Fiber Composites | Microcontrollers | Python | AI Prompting | Technical Documentation | Mechanical testing |

Interest: Working on my 2013 BMW 335i | Running | Skiing | Drawing | Exploring Adirondack Mountains | GoPro