

# Sundeep Singh

(973)-980-8959 | singhsundeep64@gmail.com  
sundeepsingh.net | linkedin.com/in/sundeepsinghnj

## ***EDUCATION***

---

**New Jersey Institute of Technology** – Newark, NJ  
Bachelor of Science in Mechanical Engineering  
GPA: 3.870 / 4.000

Sept 2018 – Dec 2021

## ***SKILLS & RELEVANT COURSEWORK***

---

**Engineering Affiliated Software:** SOLIDWORKS 2020+ (Certified), Autodesk Inventor 2014+ (Certified), AutoCAD 2020+, Creo Parametric 5.0+, MD Solids 4.1.0

**Programming Languages:** Python 3.8+, MATLAB 8.6+, Arduino 1.8+

**Data Analysis Software:** SAP, Microsoft Power BI, Microsoft Excel, Minitab

**Relevant Coursework:** Computer Programming and Problem Solving, Data Structures and Algorithms, Discrete Mathematics, Drone Science Fundamentals

## ***WORK EXPERIENCE***

---

**Collins Aerospace** – Windsor Locks, CT  
*Project Engineer I*

Feb 2022 – Present

- Provide design oversight and certification for specifications, drawings, and test plans for the Pratt & Whitney F100 and F119 turbofan engines.
- Perform system and component requirement reviews as well as compliance assessments while managing project risks and developing mitigation plans.

**Collins Aerospace** – Windsor Locks, CT

May 2021 – Dec 2021

*Air Management Systems (AMS) Service Engineering Intern*

- Investigated AMS component failures in the Boeing 777 and 787 Dreamliner fleets, gathering incoming field data to perform root cause analyses.
- Resolved pre-existing corrective action plans to update aircraft component maintenance manuals in compliance with the Air Transport Association (ATA).

## ***PROJECTS***

---

**Project Respire** – Woodland Park, NJ  
*Co-Founder*

May 2020 – Present

- Developed a potentially lifesaving accessory for patients undergoing CPR, delivering increased accuracy, reduced risk, and less strain on first responders.
- Initial prototype has been designed utilizing Autodesk Inventor and programmed using Python, undergoing continuous improvements and anticipating a fully functioning prototype by Summer 2022.

**Surveillance Drone** – Newark, NJ

Sept 2021 – Dec 2021

*Research Assistant*

- Studied the complex nature and design of the neuromorphic camera along with its multiplex sensor for its potential use in a surveillance drone, phasing out traditional camera technology.
- Trained an artificial intelligence program to recognize moving subjects (e.g. cars, people, and vehicles) using a python script and annotated footage from the neuromorphic camera.
- With the artificial intelligence program uploaded to a Raspberry Pi, linked to both the neuromorphic camera and the DJI drone, the proof of concept was validated with a functioning prototype.

## ***AWARDS & ORGANIZATIONS***

---

- American Society of Mechanical Engineers (NJIT) Sept 2018 – Present
- Academic Excellence Scholar (NJIT) Sept 2018 – Dec 2021
- Newark Sikh Student Association (Rutgers and NJIT) Sept 2018 – Dec 2021
- Kaiser Scholarship (NJIT) Sept 2020 – Dec 2021
- Michaud, J.Ray & M. Endow Scholarship (NJIT) Sept 2020 – Dec 2021