

Jerrin Bright [Mechanical Engineer]

Versatile Engineer with expertise and skills in Robotics, Data Science, CAD Designing & Simulations, Front-End Website developing and Optimization.



✉ Jerriebright@gmail.com

☎ 9840178777

📍 Chennai, India

📅 25 September, 2000

🌐 [linkedin.com/in/jerriebright](https://www.linkedin.com/in/jerriebright)

EDUCATION

Under-Graduation - Vellore Institute of Technology [B. Tech]

2018 - Present

CGPA: 8.26

School- Chettinad Vidyashram [CBSE]

2003 - 2018

10th, 9.4 CGPA; 12th, 83.2

WORK EXPERIENCE

Autonomous System Developer

Nov 2020-Present

@ AERO2ASTRO, Tamil Nadu, India

Developing a firmware for Navigation using AEROSTACK framework, ROS & SLAM. The concept will resolve GPS reception glitches

Operations Manager

Nov 2020-Present

@ Madras Scientific Research Foundation, Tamil Nadu, India

Working on a concept to detect 3D printing defects and reinforcing with Rhinoceros software, KMeans clustering, GCN- ShapeNet, etc.

Project Research Intern

April 2020-June 2020

@ Yuan-Ze University

Worked on Smart Surveillance System, using ConvCRFs for Semantic Segmentations & Acoustic Event detection.

Data Science Intern

May 2020-July 2020

@ BrainMagic Infotech Pvt, Tamil Nadu, India

Developed an App for Automobile parts recognition, using AWS Machine learning via customized, trained Models with high precision.

ATOM Robotics

January 2019-Present

@ VIT University, Tamil Nadu, India

Founding Member & Team Lead of ATOM Robotics (an official team), VIT Chennai, platform for young aspiring minds to prospering robotics.

PROJECTS

"VESTIUM" - Smart living Closet- Designed and implemented an 80" * 80" robotic furniture, which maximizes small spaces which is poised to transform urban living. It is packed with plenty of space, hiding the bed when not in use, & allows to optimize space, at touch of a button.

ASCR [Autonomous Stair Climbing Robot]- ASCR was intended to autonomously deliver a package from one location to another. Designed using Fusion360 software & then studied using static stress, strain, frequency analysis & generatively designed for mass optimization. Path determination has been achieved using Computer Vision & ROS.

X-Ray Detection- Built a deep learning model, detecting 14 different chest related diseases using the dataset accrued by NIH consisting of more than one lakh imageries. Was trained with the help MobileNet pre-trained models & Data-Augmentation techniques resulting with an overall IOU of 75%

SKILLS

DESIGNING TOOLS

SOLIDWORKS

FUSION 360 + Simulations

EAGLE

PROTEUS

PROGRAMMING TOOLS

C

C++

PYTHON

MATLAB

EMBEDDED C

OPENCV

TENSORFLOW

FLASK+HTML+CSS+JS

MATPLOTLIB

KERAS

TECH AREAS

ROBOTICS

COMPUTER VISION

IOT

CAD

ROS

PID

HARDWARE

ARDUINO

RASPBERRY PI

ESP32

DRONES

STM32

RESEARCH AND PUBLICATION

BEST PAPER AWARD- RIACT 2020 International Conference

Robotics, Intelligent Automation and Control Technologies

Jerrin Bright, Suryaprakash R, Akash S, A Giridharan 2020

Optimization of a quadcopter frame using generative design and comparison with DJI D450 drone frame.

ACHIEVEMENTS

Recognized GALACTIC PROBLEM-SOLVER by NASA INTERNATIONAL

Winner of CURRENTS'20, NIT Trichy Autonomous Line follower

Winner of KURUKSHETRA, CEG Anna University RoboZest

First Runner-up of International Youth Fest Line follower

Fourth Runner-up of ATMOS'19, BITS Pilani Autonomous Law follower

Winner of VASHISTH'19, IIITDM Kanchipuram Autonomous Law follower

VOLUNTEER-EXPERIENCE

Machine Learning Contributor

Oct 2020-Present

Contributing machine learning blogs via CodeSpeedy Tech to various blog-based companies.

Institute of Electrical and Electronics Engineers 2019-Present
Robotics and Automation Society.

National Service Scheme

2019-Present

Active member of Indian government sponsored public service program; part of several awareness programs, including International Coastal Cleanup Day, ICG Ship Visit etc.

RoboPrix'20

2020

Student Coordinator- National Level Robotics Competition