

ALTRIN RIJO V

Chennai || altrin1151@gmail.com || +91-9488941160
<https://skill-lync.com/profiles/altrin-rijo-r452t>

Career Objective

Mechanical Engineer seeking for an entry to work in a **CAE domain** having ability to work with the pre-processor tool **ANSA** and having practical expertise with **FE modelling of plastic and sheet metal components in 2D (Shell Mesh) and 3D (Tetra & Hexa Mesh)**. Additionally, I have a foundational understanding of MATLAB scripting, creating Simulink models, and state flow to create models for ADAS & EV Powertrains.

Educational Qualification

M.E in Engineering Design, Sri Muthukumaran Institute of Technology, Chennai, **(85.55%)**. (2021)

B.E in Mechanical engineering, Loyola ICAM College of Engineering and Technology, Chennai, **(72.3%)**. (2018)

Secondary Education, Carmel higher Secondary School, Nagercoil, **(95.91%)**. (2014)

Work Experience

CAE- Intern – Tecosim Engineering Services, Bangalore [April 2023 – Present]

Major Projects :-

DIAMLER- BENZ

- The majority of plastic and sheet metal parts, such as the ***radiator seal, instrument panel, bumper, floorsections, and door trims, were mesh-assembled.*** All of the components were meshed for durability, NVH, and crash.
- Additionally, the components such as the oil sump, crank case, fluid flow tubes, etc. were constructed in 3D (Tetra & Hexa).
- In accordance with the connection information that the customer gave, connections were also made available.
- All meshing was completed in accordance with client requests, and a meshed model free of errors was supplied for further processing.
- Modal and static analysis were also done for some basic components for understanding using hypermesh and optistruct.

Assistant Professor (Design & Research)- R.M.K. College of Engineering and Technology, Chennai [Sept 21 – March 23]

- Assisting with various departmental duties and providing academic support to Professors
- Involved in teaching Engineering Graphics and various design and programming software like AutoCAD, MATLAB etc.
- Conducting research on recent topics and publishing papers in journals.
- Acted as a coordinator for the exam cell and involved in the process of conducting various exam related high confidential duties.
- Attending faculty and departmental meetings and voicing concerns or providing suggestions for improvement.
- Possesses and continually develops working knowledge of subject curriculum

Quality Assurance Engineer Trainee – TEMPEL Precisions & metals products India Pvt Ltd. [Jun 18–Jul 19].

- Coordinate with Quality Managers to discuss and resolve product quality issues raised by customers. Update customers in a timely fashion regarding the status of quality issues or any requests.
- Participate in product quality planning and control process based on customer's specifications and requirements.
- Assist in new product development activities to avoid quality issues.
- Inspect raw materials to ensure consistency
- Conduct Failure Mode Effective Analysis (FMEA) for the manufacturing products.
- Done Root cause Analysis and find out the causes for any modes of failures Also done Statistical Process control (SPC) for the products.
- Train and guide quality management team in identifying and developing problem solving methodologies to resolve quality issues.
- Document and report non-conformance and ensure continuous quality improvement

Software Skills

- **FEA PRE - PROCESSOR:**

- *ANSA (Plastic and Sheet Metal Applications).*
- *HYPERMESH*

Academic Projects

EXPRIMENTAL ANALYSIS ON FRP COMPOSITES [Post Graduation Project 2021]

- This work is aimed at studying the in-plane, inter-laminar & impact strength of laminated composite materials because of their distinct advantages of low weight, high stiffness, and high strength to weight ratios.
- Conventional composites are limited to in-plane Distributed loads. In its most basic form, a composite material is one which is composed of at least two elements working together to produce material properties that are different to the properties of those elements on their own.
- The important material properties associated with composite laminates are damping, inter-laminar shear strength and tensile strength. Inter-laminar shear strength property relates to the amount of shear stress a specific material will handle before individual plies fail in shear.
- In this project, Literature study has been made on the hybrid laminated composite materials and the production of specimen is done by fabrication using the compression molding.
- In the present study the hybrid laminated composite specimen will be prepared using the hand lay-up technique with compression molding and the specimens will be subjected to shear test as per the ASTM D-2344 standards, tensile test as per ASTM A-370 and impact test as per ASTM D-256.

INVESTIGATION AND EFFECT OF ZINC ON BIKE DISC PLATES [Under Graduation project 2018]

- A Project to increase the tear and wear resistance in the bike disc plates and to improve its lifetime and efficiency.
- Brake discs, also known as brake rotors, are a crucial part of the automotive braking system which slows down the vehicle by converting kinetic energy into thermal energy, and consequently increases the temperature of the disc friction surfaces.
- Zinc Electroplating has been done on the surface of the disc plates and the various hardness testing has been done on the surface of the disc plates and their readings are compared with the non-electroplated disc plates.
- At the End of our project, it has been found that the life time and the wear and tear resistance has been considerably increased when compared with the normal disc plates.

Achievements and Accomplishments

- Invited to serve as a judge for "LICETEEN 2021," a Loyola ICAM College of Engineering and Technology-sponsored online cultural event.
- Judged for the "FESTX-2021" event, which was organized by the LICET PATTARI, a LICET cultural committee.
- Act as an event organizer for the "Enginea 2018"- A biggest cultural event of Loyola ICAM college of Engineering and Technology.
- Won 2nd prize for a National level short film contest " AAKAM 2018 "
- Won many Inter & Intra college cultural events such as " FESTEVE 2017 & 2018 “, " TECHO FEST 2K18", "VELS
- NAKSHATRA 2017" and "SRISHTI 18 "

Extra-Curricular Activities

- Freelance teacher of Engineering subjects for under graduate students.
- Organized and coordinated several events in college festivals
- Presenting and instructing theatre art