





Personal Information



VIYOL EZEKIEL CRASTO

 Al Qasimiya, Sharjah, UAE
 +971 586676325
 viyolcrasto@gmail.com
 www.linkedin.com/in/viyolcrasto

Sex	Male	Visa Status	Employment visa -Freezone
Date of birth	30/07/1998	Marital Status	Single
Nationality	Indian	Driving License	NA

To secure a dynamic and challenging role for making a positive contribution towards the organization, and to find an environment where I could materialize my engineering experience, knowledge and interpersonal skills for mutual benefit of the organization and myself.

Work Experience

Oct 2021-Present

Estimation Engineer

Sarsan Heavy Engineering FZE, HFZA phase 2, Sharjah, UAE. www.shengg-me.com

Manufacturer of Pressure vessels, Heat Exchangers, Process Skid Packages, Water treatment Packages and Structural Steel – ASME, TEMA, API.

- Review, understand scope, drawings, BOMs, MTOs, Technical & commercial requirements, raise clarifications and prepare preliminary design and quantity take offs.
- Estimate and Forecast cost of material and fabrication manpower.
- Liaise with other departments and clients in planning, scheduling, procuring, subcontracting, audits, variations, scope change.
- Participate in bid review, kick off meeting, risk analysis sessions, project closing meeting, evaluation meetings.
- Software's used: PVelite, AUTOCAD Mechanical, AutoCAD Plant3D, Navisworks, SolidWorks, Ansys, MS Office suite, Primavera.

June 2018-Present

Freelance Design & FEA Engineer

CAD, FEA, DFM, DFA, DFAM, 3D Printing.

- Undertake research, product design, 3D modelling, 2D drafting, finite element analysis, simulation, optimization, rendering.
- Complete prototype of electric two-wheeler (moped).
- Custom machine tool design, work handling fixtures and jigs, robotics and factory automation.
- Documentation and review, FMEA, DFMEA, DVP.
- Software's used: Catia, SolidWorks, Ansys, MATLAB, Fusion 360, Simulia, MS Office Suite.

Apr 2018 - Mar 2020

Vehicle Dynamics and Design Engineer

Team SJEC Racing, Mangaluru, India. <https://sites.google.com/view/teamsjecracing>

All-Terrain Vehicle Team – SAE Collegiate Club

- Design, Development, Fabrication, Assembly and Testing of an All-Terrain Vehicle for the SAE Baja CDS.
- Responsible for research, engineering, designing and integrating the steering and suspension system.
- Employed use of Computer Aided Design and Engineering (CAD/CAE) practices to model, draft, analyse (FEA), optimize (Topology) and then manufacture and test complex assemblies (simulation & track test).
- Employed use of Computer Aided Design and Engineering (CAD/CAE) practices to model, draft, analyse (FEA), optimize (Topology) and then manufacture and

test complex assemblies (simulation & track test).

- Regularly used DFMEA, FMEA, DFA/DFM, validation techniques and decision matrix tools to compare, review and inform design decisions.
- Model based design and vehicle dynamics calculations using MATLAB and Simulink to evaluate subsystem models and validate vehicle integration.
- Model based simulation using Simulia to analyse assemblies and MSC ADAMS to analyse vehicle dynamics parameters.
- Design, Cost and budget presentation and review.
- Software's used: Catia, SolidWorks, Ansys, MATLAB, Fusion 360, Simulia, LS Dyna, MSC ADAMS, Lotus Shark, MS Office Suite.
- Awards: AIR 39th in BAJASAEINDIA 2019 & AIR 24th in BAJASAEINDIA 2020, Pithampur, India

May 2018- June 2020

Design and Manufacturing Engineer

Gladiator Robotics, Mangaluru, India.

Combat Robotics, Autonomous and Amusement Hobby bots.

- Design of combat defensive and attacking bots, sumo bot, soccer bot, line follower, maze solver, quadcopter, RC airplane and water propulsion rocket.
- FEA simulation for the design.
- Manufacturing of bots as per design.
- Achievements: 1st in Robowars at NITK, Surathkal, India.
- 1st in Robowars at TIARA 2K19 held at SJEC, Vamanjoor, India.
- 2nd in Robowars at Malnad College of engineering, Hassan, India.
- 1st in Water Rocket at Aerophilia 2019, Sahyadri, Mangaluru, India

July 2019 – Aug 2019

Intern – UAV Structures

Aeronautical Development Establishment (ADE) – Defence Research and Development Organisation (DRDO), Bengaluru, India.

www.drdo.gov.in/labs-and-establishments/aeronautical-development-establishment-ade

Key Aeronautical Systems Design House involved in the design and development of the state-of-the-art Unmanned Aerial Vehicles and Aeronautical Systems and technologies to meet the requirements of the Indian Armed forces in Unmanned Aerial Vehicles, Flight simulators, Pilotless target aircraft, Flight control systems, Air Weapons.

- Analyse and prepare report on the structure of UAV using Simulia & MSC Nastran – failure analysis.
- Day to day report and documentation of research done.
- Study the behaviour of fasteners in Engine mount brackets, landing gear and body.
- Developing fastener selection criteria.
- Develop a calculator for load calculation in joints.
- Study of GD&T application in joints.

Education and Training

2016-2020

Bachelors of Engineering - Mechanical Engineering

ST Joseph Engineering College, Mangaluru, India. <https://sjec.ac.in>

Projects

- “Design and development of test rig for the performance evaluation of vehicle cabin thermoelectric generator.”,
Objective of the project was to simulate and map typical thermo-physical conditions of the vehicle cabin and get maximum conversion efficiency possible.
- Design and Analysis of a Bicycle frame to test for its structural and dynamic behaviour during on-road condition.

Personal Skills

Mother tongue

Konkani.

Other Languages English, Hindi, Kannada, Tulu.

Communication skills

- Good communication skills gained through my academics and experience as estimation engineer.
- Able to interact regularly and comfortably across various departments to negotiate solutions that foster strong relationships and continued success.
- English language labs, individual effectiveness labs and organisational effectiveness labs by I-Point through 2016-19.

Organisational skills

- Able to lead and take responsibility for decisions.
- Proactive and has a continuous improvement mind-set.
- Able to think logically and solve problems from basic principles.
- Willing to operate and approach flexibly over a wide range of work areas, working times and sites, supports and delivers change were directed by the management.
- Able to multitask, adapt and prioritize the workload.

Job-related skills

- Well versed with work ethics.
- Awareness of Health and Safety Standards and Regulations.

Digital skills

- Good command of office suite (word, excel, presentation).
- Good command of graphics / video editing software gained as an amateur graphic designer. (Adobe Photoshop, Adobe Illustrator, Adobe InDesign, Premiere Pro, Vegas Pro, Blender, Canva.

Other skills & Interests

- Drone racing and photography.
- Motorsports.

Additional Information

Courses & Certifications

- Workshop on “Solar Vehicle Design and Development”.
- Workshop on “Hands on with MATLAB”.
- FDP on “MATLAB Applications for Mechanical Engineering” by CoreEL Technologies.
- FDP on “Applications of MATLAB for Mechanical Engineers” by IE(I)- SJEC Chapter.
- Orientation on “Aerospace and Defence” by Center of Excellence, Bengaluru.
- Certified SolidWorks Professional, Associate Sustainability, Associate Additive Manufacturing.
- “Catia V5 Comprehensive” by Tutorialspoint.
- MATLAB Onramp, SIMULINK Onramp.
- “Introduction to Self-Driving Cars” by University of Toronto through Coursera.
- “Digital Manufacturing and Design” and “Digital Thread: Components” by University of Buffalo and The State University of New York though Coursera.
- “Excel Skills for Business: Essentials” by Macquarie University through Coursera.
- Python by University of Michigan through Coursera.

Annexes

- https://drive.google.com/drive/folders/1JYCoSudz7H0IwcjtVY4IDIo3V6FkXkXg?usp=share_link