



# Irfan Habib C N

📍 Stuttgart, 📞 +49 1522 3762220

✉️ [cnirfan@gmail.com](mailto:cnirfan@gmail.com), [Xing](#), [Personal Website](#)

## Profile

Engineering design expert, 5+ years experience in computational mechanics, 3D modeling and programming. Professional with project experience from concept to development.

## Interests and Skills

- Thermomechanical analysis and FEM
- Ceramic & Metal testing
- CAD & CAE – SolidWorks, Creo, and CATIA
- Programming – Matlab/Simulink, Python, Fortran and Unix
- Software – Abaqus, Ansys, Hyperworks, and Siemens

## Education

10.2016 – 10.2021 **PhD** in Mechanical Engineering, Technion IIT, Israel.

07.2014 – 07.2015 **M.Eng** in Aerospace Engineering, IIT Madras, India.

10.2010 – 07.2014 **B.Eng** in Aerospace Engineering, IIT Madras, India.

## Experience

- |                   |   |   |
|-------------------|---|---|
| 10.2016 – 10.2021 | <b>PhD:</b>   | Technion - Israel Institute of Technology, Israel |
|                   | <ul style="list-style-type: none"><li>• Thermomechanical analysis of metals, ceramics and polymers using numerical and experimental analysis.</li><li>• Testing of materials under various loading conditions.</li><li>• Structural analysis of 3D printed materials.</li><li>• Sheetmetal forming under extreme environmental conditions.</li><li>• Utilization of CAE and FEM and image processing.</li><li>• Projects with international collaborations.</li></ul> |   |
| 07.2019 – 09.2019 | <b>Internship:</b>  | Airbus Defense & Space, Spain                     |
|                   | <ul style="list-style-type: none"><li>• Development of the numerical model of a satellite launcher component.</li><li>• Implementation of a thermomechanical model for product development.</li></ul>   |   |
| 06.2019 – 07.2019 | <b>Research collaboration 1</b>   | UC3M – University of Carlos III Madrid, Spain     |
|                   | <ul style="list-style-type: none"><li>• Development of material models for structural analysis.</li><li>• Employment of open source FEA packages.</li></ul>   |   |
| 09.2018 – 11.2018 | <b>Research collaboration 2:</b>  | LEM3 - University of Lorraine, France             |
|                   | <ul style="list-style-type: none"><li>• Implementation of damage model for ceramics.</li><li>• Validation of models with experiments.</li></ul>   |   |

- |                   |   |   |
|-------------------|---|---|
| 04.2016 – 09.2016 | <b>Research assistant</b>   | National Institute of Ocean Technology, India |
|                   | <ul style="list-style-type: none"><li>• Control system for the motion of robotic fish.</li><li>• Implementation of PID Control systems using Matlab Simulink.</li></ul>       |   |
| 08.2015 – 04.2016 | <b>Software Developer</b>   | Moonraft Innovation Labs, India               |
|                   | <ul style="list-style-type: none"><li>• Frontend-developement of websites and Android based applications.</li><li>• GUI developments using HTML/CSS and JavaScript.</li></ul> |   |

## Organisation & Training

---

- Organization of workshops and competitions to teach RC aircraft building to nearly 1000 students.
- Mentored several bachelor and master students during M. Eng and PhD.

## International Events

---

- Presentation of research at 5 international conferences. Participation in 3 workshops and 1 summer school resulting in deep understanding and extensive exposure to research and development.
- Postings in Spain and France and a secondment in Spain (Airbus Defense& Space).

## Achievements

---

- Marie Skłodowska-Curie ITN-ETN – Scholarship from 'ITN OUTCOME project', organized by the European Union's Horizon 2020 research and innovation program.
- All India position 89 in Graduate Aptitude Test in Engineering-2014 (top 0.5%).

## Personal Vitae

---

Citizenship	India
Date of birth	31.10.1991

## Hobbies

---

Football, Robotics, occasional reading and stand-up comedy.