



# Irfan Habeeb C N

📍 Stuttgart, Germany

[in LinkedIn](#), [🌐 Personal Website](#)

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## Profile

Engineering design expert, 6+ years experience in thermo-structural analysis, 3D modeling and programming. Professional with project experiences from concept to development.

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## Interests and Skills

- Electric motor design – AC & DC
- Thermomechanical analysis and FEM
- CAD & CAE – SolidWorks, CATIA, and Creo
- Programming – Matlab/Simulink, Python, Fortran and Unix
- Software – Abaqus, Hyperworks, Siemens NX and Ansys

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## Education

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|-------------------|---|
| 10.2016 – 10.2021 | <b>PhD</b> in Mechanical Engineering, Technion IIT, Israel. |
| 07.2014 – 07.2015 | <b>M.Eng</b> in Aerospace Engineering, IIT Madras, India.   |
| 10.2010 – 07.2014 | <b>B.Eng</b> in Aerospace Engineering, IIT Madras, India.   |

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## Experience

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|-------------------|---|
| 06.2022 – Present | <b>Development Engineer:</b> Winkelmann Elektromotoren GmbH & Co. KG  |
|                   | <ul style="list-style-type: none"><li>• Mechanical design and analysis of electric motors – AC &amp; DC, Synchronous &amp; Asynchronous.</li><li>• Structural, thermal analysis of electric motors.</li><li>• Development of high-speed motors.</li><li>• Work experience with production, testing and customer service.</li></ul>  |
| 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></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 material 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-development of websites and Android based applications.</li> <li>• GUI developments using HTML/CSS and JavaScript.</li> </ul>	

## Organisation & Training

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- 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

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- 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

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- 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

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Citizenship	India
Resident and work permit	Germany
Languages	Englisch (C2), German (B1, currently learning)

## Hobbies

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