

# ROSHNA VAKKEEL

## Junior Full Stack Software Developer

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[LinkedIn](#) • [GitHub](#) • [Portfolio](#)

### Executive Summary

I am a passionate Junior Software Developer with a Diploma in Full stack Software Development and Bioorganic Chemist with 10+ years of research and interdisciplinary project management experience. Possessing transferable skills such as effective communication, interpersonal skills, team-work, diligence, composure and patience, I aspire to be a bridge between Science and Tech. Now, I am eager to gain entry into the tech industry into an exciting development team where I can develop and contribute my unique creative, problem-solving, interpersonal and critical thinking skills.

### Education

<i>Sep 2022–Mar 2023</i>	<b>Diploma in Full Stack Software Development</b> Specialization: Advanced Frontend Code Institute - Dublin, Ireland (Credit: University of West of Scotland)
<i>Aug 2007–Apr 2014</i>	<b>Doctor of Philosophy (PhD)</b> in Chemistry National Chemical Laboratory (NCL), Pune, India
<i>Aug 2005–Jun 2007</i>	<b>Masters of Science (MSc)</b> in Organic Chemistry University of Pune, India
<i>Aug 2002–Jun 2005</i>	<b>Bachelors of Science (BSc)</b> in Chemistry Abeda Inamdar College, University of Pune, India

### Technical Skillset

Programming Languages:	<b>HTML5, CSS3, JavaScript, Python</b>
Libraries/Frameworks:	<b>React, Django, Bootstrap, React-Bootstrap, Django-REST, Pandas</b>
Database Technology:	<b>Postgres-SQL</b>
Communication Protocols:	<b>APIs, REST, HTTP, JSON</b> (Data Format)
Development Workflow:	<b>Git</b> (Version control), <b>GitHub</b> (Hosting), <b>VSCode</b> (IDE , Editing), <b>Heroku</b> (PaaS, to deploy and manage apps), <b>Markdown</b> (README texts)
App Development Platforms:	<b>Mendix</b> (SaaS, low-code platform to develop mobile/web apps) ( <b>MENDIX Rapid Developer Certification</b> , No. <b>37687</b> – 3 <sup>rd</sup> July 2022)
Web Design Tools:	Chrome DevTools, Lighthouse, Balsamiq, Lucidchart

### Portfolio projects

- **Be Inspired** - A social media App to connect people to spread positivity through their inspirations.  
**Technologies Used** - HTML5, CSS with React-Bootstrap, JavaScript, React (Front End) and, Python, Django-REST framework (Back End) along with Heroku for hosting website.  
**GitHub:** <https://github.com/RoshnaVakkeel/be-inspired-pp5-ci>

- **Little Learner's Lab Logs** - A website for kids to explore and create activity logs of fun experiments.  
**Technologies Used** - HTML5, CSS with Bootstrap, Python, Django framework, Postgres-SQL DB, Cloudinary for media management, Heroku for hosting website.  
**GitHub:** [https://github.com/RoshnaVakkeel/Little\\_Learners\\_Lab\\_Logs](https://github.com/RoshnaVakkeel/Little_Learners_Lab_Logs)
- **myLab Data Manager** – A lab chemical inventory parsing and searching software.  
**Technologies Used** - Python, Pandas Library and Heroku for hosting website.  
**GitHub:** [https://github.com/RoshnaVakkeel/myLab\\_Data\\_Manager](https://github.com/RoshnaVakkeel/myLab_Data_Manager)
- **Chem Meets Codes** – Computational chem evolution vs programming languages – A comparison.  
**Technologies Used** - HTML5, CSS3.  
**GitHub:** [https://github.com/RoshnaVakkeel/Chem\\_Meets\\_Codes](https://github.com/RoshnaVakkeel/Chem_Meets_Codes)
- **Chem Around Us** – A quiz based on chemistry that surrounds us.  
**Technologies Used** - HTML5, CSS3, JavaScript.  
**GitHub:** [https://github.com/RoshnaVakkeel/Chem\\_Around\\_Us](https://github.com/RoshnaVakkeel/Chem_Around_Us)

## **Work and Research Experience**

Jul 2014–Nov 2018

### **Post-doctoral Research Associate**

Max-Planck Institute for Polymer Chemistry, Mainz, Germany &  
INM – Leibniz Institute for New Materials, Saarbrücken, Germany.

- Gained technical expertise on experimentation, analysis, data collection and further studies. Maintained safety data sheets for chemicals, synthesized compounds etc., and GMP guidelines.
- Supervised and trained PhD, project students and CTAs.
- Preparation of budget proposals for projects, procurement of material and management of inventory
- Collaborate and co-ordinate meetings with cross-functional experts from various scientific disciplines
- Prepare SDS, SOPs for laboratory instruments, and follow good laboratory practices
- Writing, editing, and proofreading scientific manuscripts following scientific writing guidelines
- Handle scientific structure elucidation software - ChemDraw, PyMOL, MERCURY (crystal structure), Molecular modelling techniques - Schrödinger software.
- Presented in several national and international conferences - 12 poster and 5 oral presentations.
- Published manuscripts in high impact journals - 13 publications in WILEY-VCH, ACS, RSC, journals with a total of over 490 citations, including *Nature* (IF: 49.96). As Author Name: Roshna V. Nair. <https://scholar.google.com/citations?user=uJ58rfgAAAJ&hl=en>

## **Voluntary Activities**

- **Guest Editor, Gels, MDPI (Nov 2021–Present)** Special Issue (SI) on “*Functional Hydrogels for Biomedical Applications*” ([https://www.mdpi.com/journal/gels/special\\_issues/functional\\_hydrogels\\_biomedical](https://www.mdpi.com/journal/gels/special_issues/functional_hydrogels_biomedical))
- **Reviewer** - *Journal of Food and Drug Analysis (Sciencedirect)*, *Nutrition (Elsevier)* since 2015

## **Additional Information**

- English (Native), German (Intermediate), Hindi (Native), Malayalam (Native)
- Career Gap: Nov 2018 – Nov 2021: Motherhood, German course and Pandemic.
- Special Interests: Music, learning languages, Yoga, travelling, intercultural events
- Enrolled in EdX's CS50's Web Programming with Python and JavaScript and creating new Apps.