

ROSHNA VAKKEEL

Junior Full Stack Software Developer

vakkeel.roshna@gmail.com • +0049 17680599495 • Berlin

Linkedin: <https://www.linkedin.com/in/roshna-vakkeel/>

Personal website: <https://roshnavakkeel.github.io/Resume/>

Executive Summary

Junior Software Developer with a Diploma in Full stack Software Development from the Code Institute and a Scientist with 10+ years of research and interdisciplinary project management experience. I am now eager to gain entry into the tech industry into an exciting development team where I can develop and contribute my unique creative, problem-solving, critical and analytical thinking skills.

Education

Sep 2022–Mar 2023

Diploma in Full Stack Software Development

Specialization: Advanced Frontend

Code Institute - Dublin, Ireland (Credit: University of West of Scotland)

Aug 2007–Apr 2014

Doctor of Philosophy (PhD) in Chemistry

National Chemical Laboratory (NCL), Pune, India

Aug 2005–Jun 2007

Masters of Science (MSc) in Organic Chemistry

University of Pune, India

Aug 2002–Jun 2005

Bachelors of Science (BSc) in Chemistry

Abeda Inamdar College, University of Pune, India

Technical Skillset

Programming Languages:

HTML5, CSS3, JavaScript, Python

Libraries/Frameworks:

React, Django, Bootstrap, React-Bootstrap, Django-REST, Pandas

Database Technology:

Postgres-SQL

Data Formats:

JSON, CSV

Communication Protocols:

APIs, REST, HTTP

Development Workflow:

Git (Version control), **GitHub** (Hosting), **VSCode** (IDE , Editing),
Heroku (PaaS, to deploy and manage apps), **Markdown** (README texts)

App Development Platforms:

Mendix (SaaS, low-code platform to develop mobile/web apps)

Web Design Tools:

Chrome DevTools, Lighthouse, Balsamiq, Lucidchart

Portfolio projects

- **Be Inspired** - A social media App to connect like minded people who wish to look at the bright side and can also spread positivity to those who seek it 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>

Live Site: <https://be-inspired-pp5-ci.herokuapp.com/>

- **Little Learner's Lab Logs** - A website where curious kids of all ages can explore, create activity logs and also post fun science experiments that can be performed even at home.
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
Live Site: <https://little-learners-lab-logs.herokuapp.com/>
- **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
Live Site: <https://mylab-data-manager.herokuapp.com/>
- **Chem Meets Codes** – A website that compares computational chemistry evolution with progress of programming languages.
Technologies Used - HTML5, CSS3.
GitHub: https://github.com/RoshnaVakkeel/Chem_Meets_Codes
Live Site: https://roshnavakkeel.github.io/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
Live Site: https://roshnavakkeel.github.io/Chem_Around_Us/

Certifications

- **MENDIX Rapid Developer Certification**, Certificate No. **37687** – 3rd July 2022
- Certification Course on Information Technology (A⁺ Grade), Department of Computer Science, Abeda Inamdar College, University of Pune, India – 2004-2005.
- Certification Course on Patents for Scientists and Engineers – 7th -14th Feb 2014, IP Facilitation Center (IPFACE), NCL Innovation Park, Pune, India.

Work 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.

- Designed, synthesized and characterized photoprotected amino acids and medicinal compounds to develop latent biologically active molecules for projects based on regenerative therapies.
- 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.

Research Experience

Postdoctoral Tenure: “Design, Synthesis and Cell Studies of Phototriggerable Bioactive Selective Integrin Antagonists, VEGF mimics, and Actin Inhibitors to attain Spatiotemporal Control of Cellular Adhesion, Migration and Proliferation on Biomaterials”

PhD Tenure (2007 - 2014): “Design and Development of Synthetic Oligomers with Heterogeneous Backbones Featuring α/β -conjugated Building Blocks”

- 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*” – *Soon to be published*
https://www.mdpi.com/journal/gels/special_issues/functional_hydrogels_biomedical

- Defined summary, scope and agenda to set up SI website.
- Prepared prospective authors list, sent out invites, managed, scrutinized, and oversaw submissions, and as per ethical and editorial standards, made final decisions on manuscripts.
- **Reviewer - Journal of Food and Drug Analysis (Sciencedirect), Nutrition (Elsevier) since 2015**

Awards/ Memberships

- **2009 - 2012:** Senior Research Fellowship (SRF) by CSIR, India
- **2007 - 2009:** Junior Research Fellowship (JRF) by CSIR, India
- **2014:** NCL Research Foundation- NANAI NATU AWARD – 2013, Citation Awarded
- **2004 – 2005:** Member of ***Exploratory*** (Intercollegiate Scientific Educational Organization)
- **2003 –2005:** Member of ***National Service Scheme*** (Empowerment of women in rural area)

Transferable Skills

- Critical and analytical thinking, data analysis, interpretation, logical-reasoning, and problem-solving
- Effective communication, interpersonal and presentation skills
- Co-ordinating and collaborating across different teams, meeting deadlines, and managing resources.
- Diligence, composure, patience and time management

Additional Information

- English (Native), German (Intermediate), Hindi (Native), Malayalam (Native)
- Special Interests: Music, learning languages, Yoga, travelling, intercultural events

Berlin, May 2023