

## Omid Shenavar

↑ Shiraz, Iran

+989171399158

▼ shenavar.omid@gmail.com

omidshenavar.github.io

A passionate plant pathologist with a Master's degree in phytobacteriology from SANRU University, where I specialized in studying bacterial pathogens, particularly *Xanthomonas* species. My curiosity about plant-microbe interactions has driven me to delve into various areas, including bioinformatics, molecular phylogeny, and pathogenicity studies. I've contributed to multiple research projects and publications, while also offering my English writing skills (<u>IELTS score 7.5 August 2024</u>) to help fellow students and researchers craft high-quality theses, articles, and academic papers for international journals. I'm actively seeking opportunities where I can leverage my diverse skill set in bioinformatics, evolutionary biology, and scientific communication to make a meaningful impact.

### **Education**

### SEPTEMBER 2014 - SEPTEMBER 2017

## MSc/ Plant Pathology SANRU/ Sari, Iran

Final Grade: 18.30/20

- Conducted research under the supervision of Professor Heshmat Rahimian, a leading figure in Iranian phytobacteriology, with a focus on plant-pathogenic bacteria.
- Actively contributed to the design and content development of the Plant Pathology Association's magazine for one year.
- Defended thesis with a score of 19.5/20.
- Published three scientific papers based on the thesis findings.

#### **SEPTEMBER 2010 – JULY 2014**

### **BSc/ Plant Protection**

## Shiraz University/Shiraz, Iran

Final Grade: 16.46/20

- Active member of the Editorial Board for the Plant Protection Association at Shiraz University. Received several commendations from the university's Vice-Chancellor for contributions to the student association.
- Served on the organizing committee for the Scientific Seminar on Evolution, led by Dr Hossein Masigol and Professor Mostowfizadeh-Ghalamfarsa, coordinating event logistics and activities.
- Achieved a top double-digit rank (68) in the national entrance exam for the M.Sc. program, securing a place at SANRU.

### Languages

• English: IELTS 7.5 (Aug 2024)

• Persian: Native

### **Publications**

### **Journal Articles**

- 1) 2025. Leaf spot and Stem Canker of pistachio trees incited by *Xanthomonas* strains. Maryam Khorasani, Akbar Hosseinipour, **Omid Shenavar** and Heshmatolah Rahimian. Journal of Phytopathology. In Press. http://dx.doi.org/10.1111/jph.70078
- 2) 2025. Challenges and opportunities in defining aquatic fungi. Hossein Masigol, Alice Retter, **Omid Shenavar**, et al. To be published.
- 3) 2023. Characterization of *Xanthomonas hortorum* isolates causing leaf spot on *Primula vulgaris*. **Omid Shenavar**, Heshmatolah Rahimian, Ali Barzegar. Plant Pathology. https://doi.org/10.1111/ppa.13782
- 4) 2017. First report of leaf spot caused by *Colletotrichum coccodes* on *Viola tricolor* in Iran. T. Karamnejadi, A. Solhizadeh, **Omid Shenavar**, M.A. Tajick-Ghanbari. Journal of Plant Pathology.
- 5) 2015. Computerized Interactive Keys for Identification of Fungi. **Omid Shenavar**, Mostowfizadeh-Ghalamfarsa Reza. Plant Pathology Science.

### **Conference Papers**

- 1) 2022. Multi Locus Sequence Analysis of *Candidatus* liberibacter asiaticus Isolates in Iran. Siavash Samavi, Mohammad Mehdi Faghihi, Abdolnabi Bagheri, Valiollah Babaeizad, **Omid Shenavar**, Mohsen Amiri Mazraie. 24th Iranian Plant Protection Congress.
- 2) 2018. Investigation of Pathogenicity and Molecular Characteristics of *Staphylococcus* Strains Causing Bacterial Canker in Central Iran. Esmaeil Asadi, Heshmatolah Rahimian, **Omid Shenavar**, Valiollah Babaeizad, S. Mohamad Alavi. Proceedings of the International Congress of Science and Engineering.
- 3) 2018. Isolation, Identification, and Phenotypic-Biochemical Characterization of *Staphylococcus warneri* Strains, the Causative Agents of Bacterial Canker in Iran. Esmaeil Asadi, Heshmatolah Rahimian, **Omid Shenavar**, Valiollah Babaeizad, S. Mohamad Alavi. Proceedings of the International Congress of Science and Engineering.
- 4) 2017. Phenotypic, Molecular, and Pathogenicity Investigation of *Xanthomonas* Strains Causing Primula Leaf Spot. **Omid Shenavar**, Heshmatolah Rahimian, Ali Barzegar. First International Symposium on Applied Research in Agricultural Sciences, Natural Resources, and Environment.
- 5) 2017. Molecular Identification and Taxonomic Position of *Xanthomonas* Strains Causing Bacterial Leaf Spot in Primula Based on *gltA* Gene Sequence Analysis. **Omid Shenavar**, Heshmatolah Rahimian, Ali Barzegar. First International Symposium on Applied Research in Agricultural Sciences, Natural Resources, and Environment.

## Experience

2019 - PRESENT

## Technical Projects & App Development

Independently designed and developed multiple desktop applications to support pharmacy operations and research tasks. Demonstrated proficiency in Python, C#, and JavaScript, with a focus on usability, data handling, and localization (Persian date/calendar support). Notable projects include:

- Pharmacy Doctor Salary Calculator (C# / WPF): Calculates lawful working hours, salary breakdowns, and overtime for pharmacy staff, including Persian calendar support.
- Special Medicine Management (C# / Windows Forms): Tracks special medicine records in pharmacies with search, SQLite storage, and Excel export.
- Drug Insurance Status Checker (Python / Tkinter): Queries and displays insurance status from national databases (Naft, Janbaz).
- Grade Viewer & Invoice Management System (Python / PyQt5): Tools for student grade viewing and pharmacy invoice tracking with database and Excel export functionality.
- Ganjine Plasmoid (JavaScript / Qt / KDE): A
  desktop widget that displays random Persian
  poems from ganjoor.net with UI customization
  and poem sharing features.

More details and screenshots available at: omidshenavar.github.io/apps/

2017 - PRESENT

## Freelance Writer, Consultant, and Translator

- Assisted M.Sc. and Ph.D. students with thesis writing, academic articles, and research projects in plant pathology and related fields.
- Provided translation services for academic manuscripts (Persian to English) to meet international journal standards.
- Conducted bioinformatics analyses, including genomic data interpretation, statistical modeling, and visualization for research projects.
- Collaborated with students to enhance research paper quality, advising on structure, methodology, and presentation for successful journal acceptance.

2014 - 2016

# IT Support Assistant (Student Employment)/ Sari, Iran

- Provided technical support to the university's IT department, handling computer repairs and maintenance across campus.
- Assisted students with system troubleshooting and resolved software and hardware issues, improving the university's IT services.

2019 - PRESENT

# Pharmacy Manager / Shiraz, Iran

• Managed all aspects of pharmacy operations, including inventory management, staff training, and customer service, while ensuring compliance with health regulations.

### Skills

### **Technical Skills**

- **Molecular Phylogeny**: Experience in molecular identification and phylogenetic analysis of plant pathogens using gene sequencing techniques. Skilled in constructing phylogenetic trees to determine evolutionary relationships.
- **Bioinformatics**: Proficient in analysing genomic data, including Multi-Locus Sequence Analysis (MLSA) for species identification. Skilled in LDA for text mining and literature review in biological research. Familiar with tools like MrBayes, RAxML, BLAST, MEGA, and Clustal for sequence alignment and comparative genomics.
- **Pathogenicity Assays**: Hands-on experience with pathogenicity testing, virulence assays, and disease diagnostics in various plant species. Skilled in designing and conducting experiments to evaluate pathogen-host interactions.
- **Laboratory Techniques**: Proficient in molecular biology techniques such as PCR, DNA and Protein extraction, sequencing, microbial culturing, SDS-PAGE and electrophoresis. Familiar with sterile techniques and laboratory safety protocols.
- **Programming**: Knowledge of Python and R for data analysis, statistical modelling, and automation of bioinformatics tasks. Experience with libraries like Pandas, NumPy, and Biopython.
- **Linux & Open-Source Software**: Passionate Linux user with experience in multiple distributions (Fav: Fedora). Skilled in system administration, shell scripting, and managing software installations using package managers (APT, Pacman, RPM).

### **Soft Skills**

- **Scientific Writing:** Experience writing research articles, conference papers, and assisting students with academic writing.
- **Project Management:** Managed various research projects, coordinating tasks and meeting deadlines.
- **Leadership & Management:** Gained leadership skills from managing a pharmacy and supervising staff.
- **Problem Solving:** Strong analytical skills in troubleshooting both laboratory and computational issues.

### References

### Prof. Dr Heshmat Rahimian

Professor of Plant Pathology and Microbiology

Department of Plant Protection

Sari Agricultural Sciences and Natural Resources University (SANRU), Sari, Iran

Email: rahimian.h@gmail.com

### Prof. Dr Reza Mostowfizadeh Ghalamfarsa

Professor of Plant Pathology

Department of Plant Protection

School of Agriculture, Shiraz University, Bajgah, Shiraz, Iran

Email: rmostofi@shirazu.ac.ir

### • Dr Shahabeddin Abhari

Postdoctoral Research Fellow at UbiLab

University of Waterloo, Canada

Email: sabhari@uwaterloo.ca

#### • Avdin Hassanzadeh

Plant Protection Officer, Orchards and Greenhouses

Dasht-e Naz Agricultural Company

Email: a.hasanzadeh@sanru.ac.ir