

PERSONAL INFORMATION

Davorin Penava



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🌐 <http://www.gfos.unios.hr/portal/index.php/fakultet/djelatnici/penava-davorin.html>
<https://www.linkedin.com/in/davorin-penava-b6742aa4>

💬 [Skype davorin.penava](#)

Sex Male | Date of birth 15/11/1981 | Nationality Croatian

WORK EXPERIENCE

01/2017–Present

Head of bilateral programme project Damage prognosis for reinforced concrete FRAMe structures with Masonry Infill walls under 3D Earthquake action (EFRAIM)

Ministry of Science and Education of Republic of Croatia; Deustch Akademischer Austausch Dienst (DAAD)
3 Vladimir Prelog Street, 31000 Osijek (Croatia)

Business or sector Professional, scientific and technical activities

01/09/2016–Present

Erasmus+ Key Action 2 - Strategic Partnerships (Agreement n°2016-1-DE01-KA203-002905) Project Associate

Bauhaus-Universität Weimar
Marienstraße 13B, 99423 Weimar (Germany)
<https://www.uni-weimar.de/de/bauingenieurwesen/international/strategische-partnerschaften-erasmus/>

- Head of the project work group in Josip Juraj Strossmayer University of Osijek;
- Lecturer in International Elective Master of Science Course "Nonlinear Analysis of Structures: Reinforced Concrete Frames with Masonry Infill Walls", Josip Juraj Strossmayer University of Osijek, Croatia;
- Lecturer in International Elective Postgraduate Course "Applied and Computational Mathematics in Civil Engineering Application", University of Aveiro, Portugal;
- Developing project scopes and objectives;
- Develop a detailed project plan to track progress;
- Use appropriate verification techniques to manage changes in project scope, schedule and costs;
- Measure project performance using appropriate systems, tools and techniques;
- Report and escalate to management as needed;
- Create and maintain comprehensive project documentation;
- Ensure resource availability and allocation.

Business or sector Education

02/2016–Present

Head of Postgraduate University (Doctoral) and Specialist Study Programme in Civil Engineering

Josip Juraj Strossmayer University of Osijek, Faculty of Civil Engineering Osijek
3 Vladimir Prelog Street, 31000 Osijek (Croatia)
<http://www.gfos.unios.hr/poslijediplomski-sveucilisni-studij-gradevinarstvo/pocetna-pos-dr-grad>

- Overseeing the recruitment of students. Ensuring that the Faculty's admissions policy is followed in all matters including advertisement and interview. Implementing the Equal Opportunities Policy in

- allocating studentships and bursaries;
- Liaising with the Registry, as appropriate, with regard to special cases for admission;
- Ensuring accurate records of applicants and students are kept;
- Liaising with collaborative partners, industrial partners and sponsors as appropriate;
- In consultation with the Heads of Departments, allocating roles in teaching, supervision and administration to members of the department;
- Maintaining quality assurance mechanisms and ensuring that staff perform their teaching and/or supervision duties competently to postgraduate programmes and for changes to registration arrangements;
- Representing postgraduate teaching and/or research in academic staff recruitment and promotion;
- Recruitment and supervision of departmental support staff;
- Ensuring students and staff have a clear and mutually understood mechanism to raise concerns at a Faculty level;
- Dealing with disciplinary matters (including plagiarism);
- Liaising with the Registry, as appropriate, with regard to the implementation of the Student Withdrawal Procedure, Interruption of Studies and Additional Examination Arrangements;
- Promoting the Faculty's surveys to obtain feedback on the programme(s) from students. Considering all feedback obtained and taken action where necessary. Ensuring that any action taken as a result of student feedback is widely publicised;
- Organising and attending staff-student committee meetings;
- Chairing the departmental PG Committee;
- Ensuring that appropriate procedures to determine student representation on Staff-Student committees are in place;
- Coordinating, monitoring and communicating the study programme related duties/responsibilities of relevant staff and reviewing and planning and to be answerable to the Dean on such matters;
- Preparing the Faculty for postgraduate reviews, in consultation with the Dean, where appropriate. This may include Annual Monitoring of Master's programmes, departmental Precept Reviews, Periodic Review and any other quality review instigated by the Faculty or external bodies;
- Acting as the postgraduate teaching and/or research interface with central administrative services, with Faculty Committees (including the appropriate Faculty Teaching Committee with responsibility for Master's level programmes and with Committees and organisations external to the Faculty;
- To be aware of innovative teaching strategies and to respond to good practice disseminated from time to time by the Faculty;
- Assist in work to Vice dean for science and postgraduate studies.

Business or sector Administrative and support service activities

06/2016–Present

Head of research project Influence of Openings on Out-of-Plane Earthquake Resistance of Framed-Masonry Walls

Josip Juraj Strossmayer University of Osijek, Faculty of Civil Engineering Osijek
3 Vladimir Prelog Street, 31000 Osijek (Croatia)

- Developing project scopes and objectives;
- Develop a detailed project plan to track progress;
- Use appropriate verification techniques to manage changes in project scope, schedule and costs;
- Measure project performance using appropriate systems, tools and techniques;
- Report and escalate to management as needed;
- Create and maintain comprehensive project documentation;
- Ensure resource availability and allocation.

Business or sector Professional, scientific and technical activities

02/2016–Present

Deputy Head of Department of Technical Mechanics

Josip Juraj Strossmayer University of Osijek, Faculty of Civil Engineering Osijek
3 Vladimir Prelog Street, 31000 Osijek (Croatia)

Authorized in case of inability or absence of Head of Department to perform all activities within the scope of his work.

Business or sector Administrative and support service activities

01/2015–Present **President Croatian Society of Mechanics Section Osijek**

Croatian Society of Mechanics
5 Ivan Lučić Street, 10000 Zagreb Zagreb (Croatia)
<https://www.csm.hr/>

- Organizing invited lectures, symposiums and conferences;
- Helping and encouraging teachers to implement new and modern ideas in the classroom.

Business or sector Administrative and support service activities

10/2014–Present **Head of Laboratory for Experimental Mechanics "Vladimir Sigmund"**

Josip Juraj Strossmayer University of Osijek, Faculty of Civil Engineering Osijek
3 Vladimir Prelog Street, 31000 Osijek (Croatia)

- Responsible for day to day running and organising the lab;
- Administration of resources;
- Ordering the necessary materials and equipment to carry this work out;
- Ensures that the laboratory is cleaned/sanitized and kept in an orderly manner.
- Ensures all instrumentations/equipment is functioning properly to include but not limited to eyewash/safety showers and when instruments/equipment is found to be in need of maintenance/repair, he/she contacts the Equipment Engineer to have it repaired;
- Ensures lab users have been trained on the correct use of the lab equipment, in addition to mentoring and disciplining lab users for not following safety policies/procedures that have been established for the lab.

Business or sector Professional, scientific and technical activities

02/2015–02/2016 **Head of research project Micromodel of a Framed-Masonry Building to Simulate the Effects of Earthquakes (IP 2014-111)**

Josip Juraj Strossmayer University of Osijek, Faculty of Civil Engineering Osijek
3 Vladimir Prelog Street, 31000 Osijek (Croatia)

- Developing project scopes and objectives;
- Develop a detailed project plan to track progress;
- Use appropriate verification techniques to manage changes in project scope, schedule and costs;
- Measure project performance using appropriate systems, tools and techniques;
- Report and escalate to management as needed;
- Create and maintain comprehensive project documentation;
- Ensure resource availability and allocation.

Business or sector Professional, scientific and technical activities

06/2015–09/2015 **Head of research project Sensitivity Analysis of Masonry on Varying Strength of its Constituents**

Josip Juraj Strossmayer University of Osijek, Faculty of Civil Engineering Osijek
3 Vladimir Prelog Street, 31000 Osijek (Croatia)

- Developing project scopes and objectives;
- Develop a detailed project plan to track progress;

- Use appropriate verification techniques to manage changes in project scope, schedule and costs;
- Measure project performance using appropriate systems, tools and techniques;
- Report and escalate to management as needed;
- Create and maintain comprehensive project documentation;
- Ensure resource availability and allocation.

Business or sector Professional, scientific and technical activities

01/2015–02/2015

Head of architectural design project Osijek's Sunflower

Josip Juraj Strossmayer University of Osijek, Faculty of Civil Engineering Osijek
3 Vladimir Prelog Street, 31000 Osijek (Croatia)

- Developing project scopes and objectives;
- Develop a detailed project plan to track progress;
- Use appropriate verification techniques to manage changes in project scope, schedule and costs;
- Measure project performance using appropriate systems, tools and techniques;
- Report and escalate to management as needed;
- Create and maintain comprehensive project documentation;
- Ensure resource availability and allocation.

Business or sector Professional, scientific and technical activities

06/2015–Present

Associate in project Development and implementation of the Croatian Qualifications Framework in Higher Education of Civil Engineers

European Union through European Social Fund
3 Vladimir Prelog Street, 31000 Osijek (Croatia)

Member of the working group in development of learning outcomes in the area of structural modelling.

Business or sector Education

11/2014–Present

Representative of Faculty of Civil Engineering Osijek in DYNET (Dynamic Network) / SEEFORM (South Eastern European Center for PhD-Formation) in the framework of Academic reconstruction of South Eastern Europe program funded by DAAD.

Deutsch Akademischer Austauschdienst (DAAD), Bonn (Germany)

Business or sector Professional, scientific and technical activities

09/2014–Present

Research associate in research project Frame-Masonry Composites for Modelling and Standardization (HRZZ-3013)

Josip Juraj Strossmayer University of Osijek, Faculty of Civil Engineering Osijek
3 Vladimir Prelog Street, 31000 Osijek (Croatia)

- Preparation of the project proposal;
- Design of the model and producing the technical drawings;
- Testing the built in materials;
- Nonlinear computations using micromodels;
- Analysis of influence of openings on in- and out-of-plane response;
- Development of design guidelines and simplified models for practical use;
- Preparation of scientific publications.

Business or sector Professional, scientific and technical activities

12/2013–Present

Assistant Professor and Research Associate

Josip Juraj Strossmayer University of Osijek, Faculty of Civil Engineering Osijek
3 Vladimir Prelog Street, 31000 Osijek (Croatia)

- Research associate in research project Frame-Masonry Composites for Modelling and Standardization (HRZZ-3013) funded by Croatian Science Foundation;
- Research associate in research project Seismic Design of Infilled Frames (149-1492966-1536) funded by Ministry of Science Education and Sports of Republic of Croatia;
- Research associate in bilateral research project Nonlinear Analysis of RC Frames with Types of Infill Characteristic for Macedonia and Croatia funded by Ministry of Science Education and Sports of Republic of Croatia;
- Teaching in Postgraduate University (Doctoral) and Specialist Study Program in Civil Engineering;
- Teaching in Graduate and Undergraduate University Study Program in Civil Engineering;
- Mentor for doctoral and graduate theses;
- Reviewer of scientific papers;
- Associate in design of construction projects;
- Representative of Faculty of Civil Engineering Osijek in DYNET (Dynamic Network) / SEEFORM (South Eastern European Center for PhD-Formation) in the framework of Academic reconstruction of South Eastern Europe program funded by DAAD.

Business or sector Professional, scientific and technical activities

09/2012–12/2013 **Senior Assistant**

Josip Juraj Strossmayer University of Osijek, Faculty of Civil Engineering Osijek
3 Vladimir Prelog Street, 31000 Osijek (Croatia)

- Research associate in research project Seismic Design of Infilled Frames (149-1492966-1536) funded by Ministry of Science Education and Sports of Republic of Croatia;
- Research associate in bilateral research project Nonlinear Analysis of RC Frames with Types of Infill Characteristic for Macedonia and Croatia funded by Ministry of Science Education and Sports of Republic of Croatia;
- Teaching in Graduate and Undergraduate University Study Program in Civil Engineering;
- Mentor for graduate theses;
- Associate in structural design projects;
- Representative of Faculty of Civil Engineering Osijek in DYNET (Dynamic Network) / SEEFORM (South Eastern European Center for PhD-Formation) in the framework of Academic reconstruction of South Eastern Europe program funded by DAAD.

Business or sector Professional, scientific and technical activities

01/2012–01/2014 **Research associate in bilateral research project Nonlinear Analysis of RC Frames with Types of Infill Characteristic for Macedonia and Croatia**

Ministry of Science Education and Sports of Republic of Croatia
3 Vladimir Prelog Street, 31000 Osijek (Croatia)

- Establishing the international cooperation;
- Comparison of achievements in research of infilled frames with openings.

Business or sector Professional, scientific and technical activities

01/2010–01/2012 **PhD Candidate and Representative of PhD Candidates in DYNET (Dynamic Network) / SEEFORM (South Eastern European Center for PhD-Formation) in the framework of Academic reconstruction of South Eastern Europe program funded by DAAD**

Deutsch Akademischer Austauschdienst (DAAD), Bonn (Germany)

Business or sector Professional, scientific and technical activities

01/2007–01/2014 **Research associate in research project Seismic Design of Infilled Frames (149-1492966-1536)**

Ministry of Science Education and Sports of Republic of Croatia
3 Vladimir Prelog Street, 31000 Osijek (Croatia)

- Design of the model and producing the technical drawings;
- Testing the built in materials;
- Nonlinear computations using micromodels;
- Analysis of influence of openings on in- and out-of-plane response;
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- Development of design guidelines and simplified models for practical use;
- Preparation of scientific publications.

Business or sector Professional, scientific and technical activities

04/2006–09/2012 **Scientific novice**

Josip Juraj Strossmayer University of Osijek, Faculty of Civil Engineering Osijek
3 Vladimir Prelog Street, 31000 Osijek (Croatia)

- Research associate in research project Seismic Design of Infilled Frames (149-1492966-1536) funded by Ministry of Science Education and Sports of Republic of Croatia;
- Research associate in bilateral research project Nonlinear Analysis of RC Frames with Types of Infill Characteristic for Macedonia and Croatia funded by Ministry of Science Education and Sports of Republic of Croatia;
- Teaching in Graduate and Undergraduate University Study Program in Civil Engineering;
- Mentor for graduate theses;
- Associate in structural design projects;
- PhD Candidate and Representative of PhD Candidates in DYNET (Dynamic Network) / SEEFORM (South Eastern European Center for PhD-Formation) in the framework of Academic reconstruction of South Eastern Europe program funded by DAAD.

Business or sector Professional, scientific and technical activities

EDUCATION AND TRAINING

11/2015–11/2015 **Theory and application of nonlinear computations in solid mechanics (Erasmus + Key Action 1 Professional Training)**

Swansea University, College of Engineering, Zienkiewicz Centre for Computational Engineering, Swansea (United Kingdom)

- Programming and developing orthotropic material model and its implementation finite elements;
- Plenary lecture held.

09/2014–09/2014 **Certificate in Triple A+ Trainer, Teacher and Coach - Practitioner level**

Sveučilište u Zagrebu, Power2Improve, Zagreb (Croatia)

Triple A+ Training, Practitioner Level in the field of Self-Management as part of the Modernising Doctoral Education through Implementation of CROQF project - (MODOC).

12/2013–12/2013 **Certificate in Scientific Presentation Techniques**

Ruhr-Universität Bochum, Research School, Bochum (Germany)

Training held by John Cluempers PhD and supported by Deutsch Akademischer Austauschdienst (DAAD) .

- 12/2013–12/2013 **Doctoral status seminar and lectures (DAAD/SEEFORM)**
Ruhr-Universität Bochum, Research School, Bochum (Germany)
- EN1990:2002 + A1:2005 Basis of structural design;
 - EN1991-1-1:2002, EN1991-1-2:2002, EN1991-1-3:2003, EN1991-1-4:2005, EN1991-1-5:2003, EN1991-1-6:2005, EN1991-1-7:2006, Actions on structures;
 - Engineering informatics or modern FE-applications (wind turbine model), parallel computing;
 - Overview about ANSYS-Mechanics (FE applications);
 - Overview about ANSYS-CFX (Computational Fluid Dynamics);
 - Strut and Tie methods and EN1992 Design of Concrete structures;
 - Practical part: ANSYS-CFX application in computational fluid dynamics.
- 02/2009–08/2012 **Doctor of Science in Civil Engineering**
Josip Juraj Strossmayer University of Osijek, Faculty of Civil Engineering Osijek, Osijek (Croatia)
- Thesis title Influence of openings on seismic response of reinforced concrete frames with masonry infill under supervision of prof.dr.sc. Vladimir Sigmund, dipl.ing.grad.
- 02/2012–06/2012 **Pedagogical-Psychological and Didactic-Methodical Education**
Josip Juraj Strossmayer University of Osijek, Osijek (Croatia)
- 04/2010–04/2010 **Doctoral status seminar and lectures (DAAD/SEEFORM)**
Univerzitet Sv. Kiril i Metodij vo Skopje, Skoplje (former Yugoslav Republic of Macedonia)
- EN1992 Design of concrete structures, EN1996 Design of masonry structures, EN1998 Design of structures for earthquake resistance (practical assignment);
 - Active Structures and Control: Introduction to active structures. Piezoelectric materials. Modelling of piezoelectric structures;
 - Active Structures and Control: State space and transfer function model development for active structures from the controller design point of view;
 - Active Structures and Control: Dynamical behaviour of active structures and modelling. Modal analysis;
 - Active Structures and Control: Discrete time systems for active structural control. Discrete-time controller design;
 - Active Structures and Control: Advanced control methods and applications.
- 10/2009–01/2010 **Doctoral research stay and education (DAAD/SEEFORM)**
Rheinisch-Westfälische Technische Hochschule Aachen, Aachen (Germany)
- Nonlinear computations in practical use in earthquake resistant design of framed-masonry structures;
 - Establishing international relations and cultural diversity;
 - Increasing language skills;
 - Working in international team;
 - Working under supervision of Prof. Dr.-Ing. Christoph Butenweg.
- 04/2009–04/2009 **Doctoral status seminar and lectures (DAAD/SEEFORM)**
Univerzitet Sv. Kiril i Metodij vo Skopje, Skoplje (former Yugoslav Republic of Macedonia)
- Computational Methods in Acoustics;
 - Computational Structural Dynamics.
- 11/2005–09/2008 **Master of Science in Civil Engineering**

Univerzitet u Beogradu, Beograd (Serbia)

- International Postgraduate Master of Science Course Computational Engineering supported by Deutsch Akademischer Austauschdienst (DAAD);
- Thesis title Vibration Analysis of Frame Structures Using Spectral Element Method under supervision of v.prof.dr. Mira Petronijević dipl.inž.grad., prof.dr.sc. Vladimir Sigmund, dipl.ing.grad., Prof.Dr.-Ing. Günther Schmid, PhD.

10/2000–11/2005 **Graduated Engineer of Civil Engineering**

Josip Juraj Strossmayer University of Osijek, Faculty of Civil Engineering Osijek, Osijek (Croatia)

Thesis topic Passive Energy Dissipation Devices under supervision of prof.dr.s. Vladimir Sigmund, dipl.ing.grad.

09/1996–06/2000 **Civil Technician of Civil Engineering**

Technical school Rudjer Boskovic Vinkovci, Vinkovci (Croatia)

PERSONAL SKILLS

Mother tongue(s) Croatian

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
German	B2	B2	B2	B2	B2
Spanish	A1	A1	A1	A1	A1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

Communication skills

- Excellent communication skills gained through exposure to international environment during research stays abroad as well as through education;
- Excellent contact skills with students and young researchers developed through teaching and mentoring;
- Excellent presentations skills, written and oral.

Organisational / managerial skills

- Head of Postgraduate University (Doctoral) and Specialist Study Program in Civil Engineering;
- Head of Laboratory for Experimental Mechanics;
- Deputy Head of Department of Technical Mechanics;
- Head of research project Influence of Openings on Out-of-Plane Earthquake Resistance of Framed-Masonry Walls;
- Head of research project Sensitivity Analysis of Masonry on Varying Strength of its Constituents;
- Head of research project Micromodel of a Framed-Masonry Building to Simulate the Effects of Earthquakes (IP 2014-111);
- President of Osijek branch of Croatian Society of Mechanics;
- PhD Candidate and Representative of PhD Candidates in DYNET (Dynamic Network) / SEEFORM (South Eastern European Center for PhD-Formation) in the framework of Academic reconstruction of South Eastern Europe program funded by DAAD.

Digital skills

SELF-ASSESSMENT

Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Digital skills - Self-assessment grid

- Other skills
- Small scale aircraft and ship models;
 - Sports
 - Arts and history.

ADDITIONAL INFORMATION

- Honours and awards
- **DAAD scholarship** holder for master of science degree study program;
 - **DAAD scholarship** holder for doctor of science degree study program;
 - Introducing Research and Development Project 2015 Competition by Gamax Laboratory Solutions Award;
 - **Rectors Award** of Josip Juraj Strossmayer University of Osijek in 2003/2004;
 - **Lions Club Osijek Award** for academic accomplishments in year 2003/2004;
 - The 3rd place award for Osijek's sunflower architectural design project;
 - Supervising graduate thesis "Design of framed-masonry walls under in and out of plane loading" of Filip Anić awarded as best thesis in national level in 2016 by *Croatian Association of Civil Engineers* (HSGI) based in Zagreb, Croatia;
 - Supervising seminar work of Antonio Radonjić awarded by Rectors Award in 2018;
 - Supervising seminar work of Filip Anić awarded by Rectors Award in 2015.
- Memberships
- **Croatian Society of Mechanics**
 - **DAAD Alumni**;
 - **South Eastern European Graduate School for Master and PhD Formation in Engineering SEEFORM**;
 - Society of Civil Engineers Osijek;
 - Member of Editorial Board of Civil Engineering Journal;
 - Croatian Standards Institute;
 - Vice president of Society of Civil Engineers Osijek.
- Scientific publications
- <http://bib.irb.hr/lista-radova?autor=285681>