

PERSONAL INFORMATION



**Pancho Nikolaev Dachkinov**

✉ [pdachkinov@icloud.com](mailto:pdachkinov@icloud.com)

Sex male | Date of birth 22/03/1993 | Nationality Bulgarian

WORK EXPERIENCE

October 2022 - present

**Assistant Professor**

Institute of Robotics – Bulgarian Academy of Sciences (address: Bl. 2, Acad. G. Bonchev Str., Sofia, PoB 79, Bulgaria website: <http://www.ir.bas.bg/>)

- Research
- **Business or sector** Research Institute in the field of Robotics and Applied Sciences

October 2016 – September 2019

**Young Researcher**

Institute of Robotics – Bulgarian Academy of Sciences (address: Bl. 2, Acad. G. Bonchev Str., Sofia, PoB 79, Bulgaria website: <http://www.ir.bas.bg/>)

Research

**Business or sector** Research Institute in the field of Robotics and Applied Sciences

EDUCATION AND TRAINING

October 2019 – September 2022

**Doctor of Philosophy**

Kyushu Institute of Technology, Graduate School of Life Science and System Engineering, Kitakyushu, Japan

- Investigating the Properties of Compliant Mechanisms, Biomechanics, Anatomy

2-16 – 2018

**Masters in Computer Aided Design and Technologies in Industry**

Technical University of Sofia, Bulgaria

- 3D Printing, CAD Modelling, Robotics

October 2012 - 2016

**Bachelor in Logistics Engineering**

Technical University of Sofia, Bulgaria

- Logistics, Barcode Scanning, Manufacturing Automation

PERSONAL SKILLS

Mother tongue(s)

Bulgarian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	Excellent	Excellent	Excellent	Excellent	Excellent

Communication skills

- good communication skills gained through my experience as young research and participant in Horizon 2020 MSCA. Member of MCAA.

Organisational / managerial skills

- leadership skills acquired as a President of the Foreign Student Association at Kyushu Institute of Technology from April 2021 to March 2022.
- Good organisational skills gained during the doctoral course.

Computer skills

- good command of Microsoft Office™ tools
- good at Autodesk Inventor Professional
- good with 3D Printing software

Other skills

- Problem solving
- Critical thinking

Driving licence

- B

ADDITIONAL INFORMATION

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- Publications**
- Design and Motion Capabilities of an Emotion- Expressive Robot EmoSan; Toyama, Japan; Pancho Dachkinov, Tanio Tanev, Anna Lekova, Dondogjamts Batbaatar, Hiroaki Wagatsuma; 2018.
  - Design and analysis of 3D printed and assembled rotational units. applications for mechanisms used in robotics - I. Chavdarov, P. Dachkinov, V. Trenev, A. Krastev, G. Elenchev ;
  - Augmented intelligence for teaching robots by imitation - Prof. Lekova A. PhD1, Prof. Pavlov V. PhD, Assoc. Prof. Chavdarov I. PhD , Assoc. Prof. Krastev A. PhD , Datchkinov P , Stoyanov I. ;
  - S. Kasai, P. Dachkinov, K. Tanaka and H. Wagatsuma, "A Systematic Analysis of the Knee Support Exoskeleton Based on Multibody Dynamics Toward Personalization with 3D printed Spring-Damper Components," "International Conference on Artificial Life and Robotics", (ICAROB2022).
  - P. Dachkinov, S. Kasai, K. Tanaka and H. Wagatsuma, "A computational model of 3d printing orthoses associated with a systematic structural analysis toward reverse engineering oriented production," ICIC-ELB, Vol.13, No.7, July 2022, ISSN 2185-2766.
  - P. Dachkinov, S. Kasai, K. Tanaka and Wagatsuma, "Flexible Bar Geometric Designs for Personalized Knee Orthoses Inspired by Compliant Mechanisms," Journal of Robotics, Networking and Artificial Life, in press.
  - Bhattacharjee, P. Dachkinov, H. Wagatsuma and B. Bhattacharya, "3D PRINTED BEAMS WITH VARIABLE INFILL DENSITIES," International Journal of Engineering Advanced Research (IJEAR), 2022, 2710-7167.
  - P. Dachkinov, A. Bhattacharjee, B. Bhattacharya and H. Wagatsuma, "A Multi-Material Joint System as a Three-Dimensional Spring-Damper Compliant Mechanism Toward Functional Versatility," "Journal of Advances in Artificial Life Robotics," JAALR, Volume 3, Issue 2, September 2022, pp. 67–73, online ISSN 2435-8061; ISSN-L 2435-8061.
- Projects**
- Participant in Horizon 2020 MSCA RISE Project 2017 – 2019.
- Conferences**
- Design and Motion Capabilities of an Emotion- Expressive Robot EmoSan; Pancho Dachkinov, Tanio Tanev, Anna Lekova, Dondogjamts Batbaatar, Hiroaki Wagatsuma; SCIS&ISIS2018, Toyama, Japan, 2018.
- Symposiums**
- P. Dachkinov, A. Bhattacharjee B. Bhattacharya and H. Wagatsuma, "A Knee Joint Inspired Design of a Compliant Cross-Spring Pivot," "International Symposium of Applied Engineering and Sciences," (SAES 2020).
  - P. Dachkinov, A. Bhattacharjee, B. Bhattacharya and H. Wagatsuma, "A Three-Dimensional Design and Analysis of a Multi-material Compliant Joint for Precision Engineering Applications", "International Symposium on Robotics in Industry, Agriculture and Healthcare" (ISHIAH2022).
  - S. Kasai, P. Dachkinov, K. Tanaka and H. Wagatsuma, "The Effectiveness of Force Measurement System by Using Programmable Actuators for 3D Printed Compliant Mechanisms", "International Symposium of Applied Engineering and Sciences," (SAES 2021).