## **Supervision:**

I have supervised a number of students (Bachelor, Master, and PhD theses, and student research projects) as well as research assistant/engineer and postdocs.

- Bachelor Theses (total/finished/remaining): 22/22/0
- Master Theses (total/finished/remaining): 59/58/1
- PhD Theses (total/finished/remaining): 27/10/17
- Other student projects (total/finished/remaining): 32/32/0
- Research assistant/engineer (total/finished/remaining): 16/7/9
- Postdoc (total/finished/remaining): 6/5/1

Finished projects/theses: 134

Remaining projects/theses: 28

Total projects/theses: 162

Several students and postdocs are now faculty members (e.g., SDU) or research group leaders/product managers (e.g., Edgecortix Inc., Ninebot).

#### **Bachelor Theses:**

- 1. Mr. Dennis Goldschmidt (2012, Physics, University of Göttingen, Germany): "Adaptive Climbing Behavior of Walking Machines".
- 2. Mr. Steffen Zenker (2012, Informatics, University of Göttingen, Germany): "A Vision Based Terrain Classification Interface for Walking Machines".
- 3. Mr. Patrick Kesper (2012, Physics, University of Göttingen, Germany): "Object Detection and Path Finding Algorithms Based on 2D Laser Range Measurements".
- 4. Mr. Julius Faber (2012, Informatics, University of Göttingen, Germany): "Reinforcement Learning in a Predefined Situation Space using a KUKA Lightweight Robot Arm (Simulation)".
- 5. Mr. Andrej Filippow (2013, Physics, University of Göttingen, Germany): "The Echo-State Network Applied as a Critic in a Combined Actor–Critic and ICO Controller for the Task of Single-Pole Balancing".

- 6. Mr. Eduard Grinke (2013, Physics, University of Göttingen, Germany): "Using Synaptic Plasticity in Minimal Recurrent Networks for the Adaptive Obstacle Avoidance of a Walking Robot".
- 7. Mr. Ilyas Kuhlemann (2013, Physics, University of Göttingen, Germany): "Analysing a Dynamic Walker's Gait Stability for Compliant and Rigid Ankles".
- 8. Mr. Lars Melchior (2013, Physics, University of Göttingen, Germany): "Evolution of Synaptic Plasticity using Genetic Algorithms in Neural Closed-Loop Systems".
- 9. Mr. Stepan Shishkin (2014, Physics, University of Göttingen, Germany): "Comparing Combinatorial Learning with Temporal Difference Learning for the Pole-Balancing Problem".
- 10. Mr. Thor Stærk Stenvang and Mr. Mathias Nielsen (2014, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Control and Regulation of the StarKick Football Table".
- 11. Mr. Jon Lund (2014, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Control and Motion Planning of a Five Axis Robot Arm".
- 12. Mr. Vince Jankovics (2015, Mechatronics, University of Southern Denmark, Denmark): "Artificial Neural Network based Adaptive Complaint Control for Robotic Arms".
- 13. Mr. Philipp Hannibal (2015, Physics, University of Göttingen, Germany): "Visualization of Neural Networks".
- 14. Mr. Deniel Horvatic (2015, Fakultaet furr Informatik, Hochschule Mannheim, Germany): "Efficient Reconstruction of Neural Interconnections in Simulated Spiking Neurons".
- 15. Mr. Theis Strøm Hansen and Mr. Mathias Thor (2016, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Extending Walknet towards Emergent Object Manipulation for a Hexapod Robot".
- 16. Mr. Martin Bagge Jensen and Skjold Dyre (2016, Software Engineering, University of Southern Denmark, Denmark): "Learning and Utility of Receptive Fields for Generation of Movement Patterns".
- 17. Mr. Jevgeni Ignasov (2018, Mechatronics, University of Southern Denmark, Denmark): "The motor control development of a compliant robotic arm".
- 18. Ms. Camilla Svane and Camilla Lyng Tobiasen (2018, Integrated Design, University of Southern Denmark, Denmark): "Bio-inspired robot body design for complex behavior".

- 19. Mr. Jens Troels Nielsen and Mr. Jeppe Langaa (2018, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Neural control of a pipe climbing robot".
- 20. Mr. Alexander Løvbjerg Nakos, Mr. Andreas Aagaard Asmussen, Mr. Nikolaj Pihl Sørensen, and Mr. Ole Egholm Pedersen (2019, Engineering (Robotics), University of Southern Denmark, Denmark): "Control of the Dung Beetle Robot ALPHA".
- 21. Ms. Ida Blirup Skov (2022, Engineering (Robotics), University of Southern Denmark, Denmark): "Self-solving Rubik's Cube Robot".
- 22. Mr. Erik Lyager Bjerre-Olsen (2022, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Proactive and Friendly Control of a Sensorized Elbow Exoskeleton".

#### Current projects:

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#### **Master Theses:**

- 1. Mr. Kawee Suwannasit (2010, Mechanical and Aerospace Engineering, King Mongkut's University of Technology, Thailand): "Control for Locomotion and Transformation of a Reconfigurable Spherical Robot into a Three Legged-Wheeled".
- 2. Mr. Timo Nachstedt (2013, Physics, University of Göttingen, Germany): "Adaptive Neural Oscillator with Synaptic Plasticity for Robot Locomotion Control".
- 3. Mr. Simon Christoph Stein (2013, Physics, University of Göttingen, Germany): "3D Segmentation of Objects and their Parts based on Local Geometric Cues".
- 4. Mr. Subhi Barikhan (2014, Informatics, University of Göttingen, Germany): "Multiple CPGs with Local Feedback Mechanisms for Locomotor Adaptation of Hexapod Robots".
- 5. Mr. Bassel Zeidan (2014, Informatics, University of Göttingen, Germany): "Intelligent Landmark-Based Navigation System Using Learning Techniques".
- 6. Ms. Sromona Chatterjee (2014, Informatics, University of Göttingen, Germany): "Reinforcement Learning with PI2 Algorithm to Generate Motor Primitives of a Complex Snake-Like Robot".

- 7. Mr. Dennis Goldschmidt (2014, Neural Systems and Computation, University of Zurich/ETH Zurich, Switzerland): "Modular Neural Mechanisms for Adaptive Spatial Behavior in Autonomous Robots".
- 8. Mr. Johannes Widenka (2015, Informatics, University of Göttingen, Germany): "Application of a Virtual Muscles Model on the two-dimensional biped robot RunBot".
- 9. Mr. Patrick Kesper (2015, Physics, University of Göttingen, Germany): "A Probabilistic Approach to Self-Localization and Mapping of Mobile Robots".
- 10. Mr. Hans-Joachim Krauch (2015, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Exploration and Object Retrieval with Robot Swarms".
- 11. Mr. Ditlev Andersen and Mr. Anders Prier Lindvig (2015, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Visual Segmentation of Potatoes in Cluttered Environments".
- 12. Mr. Patrick Stolc and Mr. Giuliano Di Canio (2015, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Adaptive Locomotion Control of Embodied Legged Systems".
- 13. Mr. Lasse S. Børresen (2015, Engineering (2016, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Separation of Multiple Sound Sources Using Directional Stereo".
- 14. Mr. Stoyan Stoyanov (2015, Engineering (2016, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Brain-Computer Interface for Robot Control".
- 15. Mr. Halvor Tram Tramsen (2016, Physics, University of Göttingen, Germany): "Using Anisotropic Friction to Improve Locomotion of Hexapod Robots on Steep Slopes".
- 16. Mr. Chris Tryk Lund Sørensen (2016, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Object manipulation in a hexapod robot".
- 17. Mr. Dominik Steven Weickgenannt (2016, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Action-Sequence Learning in Mobile Robotics".
- 18. Mr. Carlos Moro García (2016, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Multiple time scales of learning for adaptive behavior of mobile robots".
- 19. Ms. Imara van Dinten (2016, Engineering (Robot Systems), University of Southern Denmark, Denmark): "EEG Pattern Recognition".

- 20. Mr. Timon Tomás (2016, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Artificial Neural Control of a Prosthetic".
- 21. Mr. Martin Bulin (2016, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Classification of terrain based on proprioception sensing for multi-legged walking robot".
- 22. Mr. Ignacio Torroba Balmori and Mr. Jorge Rodriguez Marin (2016, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Design, simulation and development of a bipedal locomotion platform for human-like gaits studies".
- 23. Mr. Pongsiri Borijindakul (2017, Metrology, Physics, Faculty of Science, Kasetsart University, Thailand) "Softness Measurement and Application to Haptic system for Soft Sample".
- 24. Mr. Krzysztof Smyl (2017, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Neural-Based Control System for Autonomous Operation of Drones".
- 25. Mr.Michelangelo Setaro (2016, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Affordance learning applied on bio-inspired artificial agent".
- 26. Mr. Aditya Kapilavai (2017, Mechatronics Engineering, University of Southern Denmark, Denmark): "Modeling and Control of Dung Beetle-Like Robots".
- 27. Mr. Kristoffer Honoré (2017, Engineering (Robot Systems), University of Southern Denmark, Denmark): "EEG-based Motor Control".
- 28. Mr. Malte Carstensen (2017, Mechatronics Engineering, University of Southern Denmark, Denmark): "Implementation and Verification of an Adaptive Neural Control Oscillator for Robot Control on a FPGA".
- 29. Mr. Aitor Miguel Blanco (2017, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Neural Control of a Millipede-like Robot".
- 30. Mr. Nikolaj Schaldemose Reibke (2017, Engineering (Software), University of Southern Denmark, Denmark): "Evolving Robot Control for Object Transportation".
- 31. Mr. Gal Gorjup (2017, Mechanical Engineering, University of Ljubljana, Slovenia): "EEG signal processing and classification for advanced human-machine interfaces".
- 32. Mr. Arne Devos (2018, Katholieke Universiteit Leuven, Faculty of Engineering Technology, MSc Energy Engineering Technology, Belgium): "Development of Autonomous Drones for Adaptive Obstacle Avoidance and Object Tracking in Real World Environments".

- 33. Mr. Florentijn Degroote (2018, KU Leuven, Technologiecampus Gent, Master's in Industrial Engineering Automation): "Neural control of a compliant gummi arm robot".
- 34. Mr. David Thomas Docherty (2018, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Development of speech localization and multi-sensory fusion".
- 35. Mr. Martin Bagge Jensen (2018, Engineering (Software), University of Southern Denmark, Denmark): "Recurrent Neural Network for Movement Prediction of Surrounding Objects".
- 36. Mr. Salman Taj (2018, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Modeling, Simulation and Control of a Millipede inspired Robot".
- 37. Ms. Carolin Nowak (2019, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Reactive control for smooth object approaching of a mobile robot".
- 38. Mr. Carlos Viescas Huerta (2019, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Locomotion control and muscle models of a dung beetle robot".
- 39. Mr. Ricardo Alexandre Ribeiro Fonseca Rodrigues Do Carmo (2019, Engineering (Robot Systems), University of Southern Denmark, Denmark): "EMG-Based Prosthetic Hand Control".
- 40. Mr. Daniel Holst Hviid (2019, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Motion sequence control of a bio-inspired robot using spiking neural networks".
- 41. Mr. Mathias Thor (2018, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Modular Robot Framework".
- 42. Mr. Ada Varga (2019, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Bio-inspired Behaviour Learning for Dynamic Collision Avoidance on a Mobile Robot".
- 43. Mr. Donghao Shao (2020, Institute of Bio-inspired Structure and Surface Engineering, Nanjing University of Aeronautics and Astronautics (NUAA), China): "CPG-based climbing robot control".
- 44. Mr. Alexander Dupond Larsen (2020, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Neural control mechanisms with multiple sensory feedback for self-organized insect-like locomotion in complex situations".
- 45. Mr. Antonio Gonzalez Rot (2020, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Actuator fault detection of an UAVs".
- 46. Mr. Benjamin Rømer Hvenegaard and Mr. Emil Seerup (2020, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Adaptive Control for Exoskeleton".

- 47. Mr. Laurenz Elstner (2020, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Adaptive control for a proprioceptive motor-driven bio-inspired robot leg".
- 48. Mr. Christian Quist Nielsen (2020, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Legged robot locomotion control using proprioceptive sensory feedback".
- 49. Mr. Hemanth Kanner (2020, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Visual Monocular SLAM".
- 50. Mr. Jevgeni Ignasov (2020, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Bio-Inspired Navigation for Autonomous Robots".
- 51. Mr. Mohamed Abouseif (2020, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Learning Synergies between Motion Primitives with Self-supervised Deep Reinforcement Learning".
- 52. Mr. Phillip Meyer Kyndbøl (2020, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Using machine learning for optimizing and adapting gecko like robot locomotion".
- 53. Ms. Marlene Hammer Jeppesen (2020, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Adaptive Neural CPG-based Control for a Soft Robotic Tentacle".
- 54. Mr. Emil Lykke Diget (2021, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Machine Learning Methods for Reliable Detection of Faults for Drones".
- 55. Mr. Askarbek Pazylbekov (2021, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Soft Augmentation and Programming of a Robot Arm for an Art Installation".
- 56. Mr. Bjarke Engsig Larsen (2021, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Communication Through Softness a Visual Aid for Handover in Collaborative Robotics".
- 57. Mr. Markus Dahl Lauritsen (2022, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Lifelong Autonomous Leanring".

# Current projects:

58. Ms. Nopparada Mingchinda (current, School of Information Science and Technology, Vidyasirimedhi Institute of Science and Technology (VISTEC), Thailand): "Self-organized Locomotion of Millipedes".

## **Diploma Thesis (Equivalent to Master Thesis):**

## Past project:

1. Ms. Silke Steingrube (2007, Physics, University of Göttingen): "Chaos Control in Neuromodules and Application to Gait Generation".

#### **PhD Theses:**

- 1. Mr. Guanjiao Ren PhD Internship from School of Automation Science and Electrical Engineering, Beihang University of China (2014): "Multiple CPGs-Based Control of Walking Machines" (Co-Supervisor).
- 2. Mr. Jan-Matthias Braun (2015, Physics, University of Göttingen): "Advanced Neural Control for Adaptive Orthotic Devices" (Co-Supervisor).
- 3. Mr. Sakyasingha Dasgupta: (2015, Physics, University of Göttingen): "Dynamics of Learning and Memory in Large Recurrent Neural Networks" (Main-Supervisor).
- 4. Mr. Xiaofeng Xiong (2015, Informatics, University of Göttingen): "Neuromechanical Model for Dynamic Walking" (Main-Supervisor).
- 5. Mr. Potiwat Ngamkajornwiwat (2020, Institute of Field Robotics, King Mongkut's University of Technology Thonburi, Thailand): "Artificial Hormone Network for Adaptive Robots" (Co-Supervisor).
- 6. Mr. Nan-Sheng Huang (2020, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Neural network implementation on FPGA" (Co-Supervisor).
- 7. Mr. Nol Chindapol (2021, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Multi-scale Model of Coral Growth in the Context of Morphological Computation and Plasticity" (Main-Supervisor).
- 8. Mr. Peter Billeschou (2021, Engineering (Robot Systems), University of Southern Denmark, Denmark): "The development of a dung beetle-inspired robot for multiple functions" (Main-Supervisor).
- 9. Mr. Mathias Thor (2021, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Adaptive locomotion control of legged robots" (Main-Supervisor).

- 10. Mr. Sun Tao (2021, Nanjing University of Aeronautics and Astronautics (NUAA), Nanjing, China): "Adaptive sensorimotor coordination for self-organized locomotion and adaptation of legged robots" (Co-Supervisor).
- 11. Ms. Becky Steckhahn-Strohmer (2022, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Behavioural improvement of tactile sensing in a hexapod robot" (Co-Supervisor).

#### Current projects:

- 12. Mr. Pongsiri Borijindakul (Nanjing University of Aeronautics and Astronautics (NUAA), Nanjing, China): "Smart foot design and control for verstile climbing robots" (Main-Supervisor).
- 13. Ms. Lasri Wafae (Nanjing University of Aeronautics and Astronautics (NUAA), Nanjing, China): "Neural control with minimal force feedback and muscle models for adaptive compliance manipulation and continuous complex trajectory following" (Main-Supervisor).
- 14. Mr. Worasuchad Haomachai (Nanjing University of Aeronautics and Astronautics (NUAA), Nanjing, China): "High-level Decision Making for Complex Behavior of Gecko Robots" (Main-Supervisor).
- 15. Ms. Yanbin Zhang (Nanjing University of Aeronautics and Astronautics (NUAA), Nanjing, China): "Neural Learning for Adaptive Robot Conrol" (Main-Supervisor).
- 16. Mr. Donghao Shao (Nanjing University of Aeronautics and Astronautics (NUAA), China): "Neural Control and Learning for Advanced Climbing Robots" (Main-Supervisor).
- 17. Mr. Dong Yi (Nanjing University of Aeronautics and Astronautics (NUAA), China): "Adaptive Neural Control for Soft Object Manipulation of a Robot Arm" (Main-Supervisor).
- 18. Mr. Zang Guangyuan (Nanjing University of Aeronautics and Astronautics (NUAA), China): "Soft Gecko-Inspired Robots" (Main-Supervisor).
- 19. Mr. Chaicharn Akkawutvanich (School of Information Science and Technology, Vidyasirimedhi Institute of Science and Technology (VISTEC), Thailand): "Adaptive Neural Control for Exoskeleton" (Main-Supervisor).
- 20. Mr. Muhammad Bilal Khan (School of Information Science and Technology, Vidyasirimedhi Institute of Science and Technology (VISTEC), Thailand): "An Inchworm-Inspired Crawling Robot" (Main-Supervisor).

- 21. Mr. Jettanan Homchanthanakul (School of Information Science and Technology, Vidyasirimedhi Institute of Science & Technology (VISTEC), Thailand): "Decentralized neural control and learning for adaptive legged robot locomotion" (Main-Supervisor).
- 22. Mr. Puchong Soisudarat (School of Information Science and Technology, Vidyasirimedhi Institute of Science and Technology (VISTEC), Thailand): "Intelligent Service Robot for effective Human-Machine Interaction" (Main-Supervisor).
- 23. Mr. Binggwong Leung (School of Information Science and Technology, Vidyasirimedhi Institute of Science and Technology (VISTEC), Thailand): "Neural Control of a Dung Beetle Robot" (Main-Supervisor).
- 24. Mr. Rujikorn Charakorn (School of Information Science and Technology, Vidyasirimedhi Institute of Science and Technology (VISTEC), Thailand): "Deep Reinforcement Learning for Visual-based Motor Control" (Main-Supervisor).
- 25. Mr. Vatsanai Jaiton (School of Information Science and Technology, Vidyasirimedhi Institute of Science and Technology (VISTEC), Thailand): "Neural control of autonomous drones for inspection" (Main-Supervisor).
- 26. Mr. Naris Asawalertsak (School of Information Science and Technology, Vidyasirimedhi Institute of Science and Technology (VISTEC), Thailand): "Adaptive Neural Control for Soft Robots" (Main-Supervisor).
- 27. Mr. Thirawat Chuthong (School of Information Science and Technology, Vidyasirimedhi Institute of Science and Technology (VISTEC), Thailand): "Decentralized Neural Control with Force Feedback for Adaptive Locomotion of Legged Robots" (Main-Supervisor).

## **Student Projects**

- 1. Mr. Birk Urmersbach Bachelor Student (2009, Biology, University of Göttingen, Germany): "Single Insect-Like Leg with Adaptive Motion Control".
- 2. Mr. Johannes Schröder-Schetelig Diploma Student (2008, Physics, University of Göttingen, Germany): "Using Efference Copy and a Forward Internal Model for Adaptive Biped Walking".
- 3. Mr. Tobias Jahn Bachelor Student (2012, Physics, University of Göttingen, Germany): "Simple Sound Localization Using Three Microphones in a Plane and E-puck Interface".

- 4. Mr. Felix Maischner, Mr. Henning Stark, Mr. Julius Strake, Mr. Vitali Telezki, and Mr. Marina Eckermann Bachelor Students (2013, Physics, University of Göttingen, Germany): "Sound Localization and Obstacle Avoidance of E-puck mobile robots".
- 5. Mr. Ditlev Andersen Master Student (2014, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Intelligent Control of a Semi-Active Suspension System for Improved Road Holding and Vehicle Handling".
- 6. Ms. Imara van Dinten (2014, AI4 project, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Moving problem solving robot(s) Multi agent A\*".
- 7. Mr. Kenneth Korsgaard Meyer (2014, AI4 project, Engineering (Robot Systems), University of Southern Denmark, Denmark): "AI controller for a sailboat".
- 8. Mr. Giuliano Di Canio and Mr. Patrick Stolc (2014, AI4 project, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Exploring Energy Consumption of a Bio-inspired Robotic Leg with a Passive Tarsus Component: An Embodied AI approach".
- 9. Mr. Stoyan Stoyanov Master Student (2014, AI4 project, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Energy Acquisition in Robots using Solar Power".
- 10. Mr. Carlos Moro Garcia (2015, Engineering (Robot Systems), University of Southern Denmark, Denmark): "A Software Framework for Artificial Intelligence".
- 11. Mr. Dominik Steven Weickgenannt (2015, AI4 project, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Action-Sequence Learning in Mobile Robotics".
- 12. Mr. Krzysztof Smyl (2015, AI4 project, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Obstacle Avoidance System Utilising Neural Receptive Fields Approach".
- 13. Mr. Michelangelo Setaro (2015, AI4 project, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Adaptive locomotion control of a hexapod robot".
- 14. Mr. Chris Tryk Lund Sørensen (2015, AI4 project, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Pushing object in simulation with a hexapod robot".
- 15. Mr. Timon Tomás (2015, AI4 project, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Approximation of EMG/EEG signals with a Radial Basis Function Neural Network".
- 16. Ms. Nienke Nadine Bijma (2016, internship, Universität Kiel, Germany): "The dung beetle Geotrupes stercorarius as an inspiration for robot locomotion".

- 17. Mr. Theis Strøm Hansen and Mr. Mathias Thor (2017, individual study, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Extending the Walknet controller to manipulate objects".
- 18. Mr. Almir Mehanovic (2017, individual study, Engineering (Software Engineering), University of Southern Denmark, Denmark): "Evolving robot morphology with genetic algorithms".
- 19. Mr. Jevgeni Ignasov (2017, internship, Mechatronics, University of Southern Denmark, Denmark): "Robotic Foot Inspired by Insect Tarsus".
- 20. Mr. Jettanan Homchanthanakul (2017, internship, Engineering (Robot Systems), Institute of Field Robotics King Mongkut's University of Technology Thonburi, Thailand): "Using of artificial hormones to improve robot locomotion in changing environments".
- 21. Mr. Siribhop Yooyongchuen (2017, student exchange, Engineering, King Mongkut's University of Technology North Bangkok, Thailand): "A mobile robot with a lizard ear system".
- 22. Mr. Saran Singhsathitsukh (2017, student exchange, Engineering, Sirindhorn International Institute of Technology, Thammasat University, Thailand): "Locokit Leg Redesign".
- 23. Mr. Pulkit Saluja (2017, internship, Electronics and Communication Engineering, JECRC University, Jaipur, India): "Novel Foot Sensor Design for Legged Robots".
- 24. Mr. Christian Koed Pedersen (2017, AI4 project, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Neural Control for Autonomous Collision Avoidance for Drones".
- 25. Mr. Arthicha Srisuchinnawong (2018, internship, Nanjing University of Aeronautics and Astronautics (NUAA), Nanjing, China): "Application of an artificial hormone in a gecko robot".
- 26. Mr. Natthiphong Yaidi (2018, internship, Nanjing University of Aeronautics and Astronautics (NUAA), Nanjing, China): "Design and control of a gecko robot with backbone joints".
- 27. Mr. Kittipod Punthai (2018, internship, Nanjing University of Aeronautics and Astronautics (NUAA), Nanjing, China): "Simulation of a Dog Robot".
- 28. Mr. Thanat Ngamwongsakollert (2018, internship, Nanjing University of Aeronautics and Astronautics (NUAA), Nanjing, China): "Tracking motion of gecko experiments for locomotion of a gecko robot".
- 29. Mr. Matheshwaran Pitchai (2018, AI4 project, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Gait optimization of a six-legged walking dung-beetle robot using the Gaussian mixture model (GMM) and PI<sup>2</sup> algorithm".

- 30. Mr. Ada Varga (2018, AI4 project, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Correlation-based neural control for obstacle avoidance".
- 31. Mr. Jens Troels Nielsen and Mr. Jeppe Langaa (2018, individual study, Engineering (Robot Systems), University of Southern Denmark, Denmark): "Extending the pipebot controller".
- 32. Mr. Matevz Celcer (2022, Engineering (Robot Systems), University of Southern Denmark, Denmark): "3D Neuro Visualization".

## Research assistant/engineer:

## Past projects:

- 1. Mr. Chinnawat Chinnapun (2018–2019, School of Information Science and Technology, Vidyasirimedhi Institute of Science and Technology (VISTEC), Thailand): "Robot system integration".
- 2. Mr. Kawee Tiraborisute (2019–2020, School of Information Science and Technology, Vidyasirimedhi Institute of Science and Technology (VISTEC), Thailand): "Robot hardware design (Freelander)".
- 3. Mr. Jevgeni Ignasov (2020-2021, University of Southern Denmark, Denmark): "Neural proactive control for service robots (part of the SMOOTH project)".
- 4. Mr. Thirawat Chuthong, (2019–2021, Research center for Advanced Robotics and Intelligent Automation, School of Information Science and Technology, Vidyasirimedhi Institute of Science and Technology (VISTEC), Thailand): "Autonomous Pipe Climbing Robots".
- 5. Mr. Potiwat Ngamkajornwiwat (2020-2021, Nanjing University of Aeronautics and Astronautics (NUAA), Nanjing, China): "Artificial Hormone Mechanisms for Autonomous Robots".
- 6. Mr. Ricardo Alexandre Ribeiro Fonseca Rodrigues Do Carmo (2018–2021, University of Southern Denmark, Denmark): "Neural predictive information processing and visualization (part of the Plan4Act project)".

## Current projects:

7. Mr. Tachadol Suthisomboon (2020, School of Information Science and Technology, Vidyasirimedhi Institute of Science and Technology (VISTEC), Thailand): "Robot foot design (Freelander/AVIS/MC-PIG)".

- 8. Mr. Sujet Phodapol, (2019–2021, School of Information Science and Technology, Vidyasirimedhi Institute of Science and Technology (VISTEC), Thailand): "Morphological Computation for Adaptive PIG (MC-PIG)".
- 9. Mr. Kongkiat Rothomphiwat (2019-present, Research center for Advanced Robotics and Intelligent Automation, School of Information Science and Technology, Vidyasirimedhi Institute of Science and Technology (VISTEC), Thailand): "Autonomous Drones for Object Transportation".
- 10. Mr. Tanyatep Tothong (2019-present, Research center for Advanced Robotics and Intelligent Automation, School of Information Science and Technology, Vidyasirimedhi Institute of Science and Technology (VISTEC), Thailand): "Autonomous Service Robots for Logistics".
- 11. Mr. Atthanat Harnkhamen, (2019–present, Research center for Advanced Robotics and Intelligent Automation, School of Information Science and Technology, Vidyasirimedhi Institute of Science and Technology (VISTEC), Thailand): "Dual Arm Robot for Adaptive Manipulation".
- 12. Mr. Kitti Phongaksorn, (2020–present, Research center for Advanced Robotics and Intelligent Automation, School of Information Science and Technology, Vidyasirimedhi Institute of Science and Technology (VISTEC), Thailand): "Robot Hardware Development for Adaptive Pipe Climbing Robots".
- 13. Mr. Wasuthorn Ausrivong, (2021–present, Research center for Advanced Robotics and Intelligent Automation, School of Information Science and Technology, Vidyasirimedhi Institute of Science and Technology (VISTEC), Thailand): "Adaptive Pipe Climbing and Quadruped Robot Control".
- 14. Mrs. Thipawan Pairam, (2021–present, Research center for Advanced Robotics and Intelligent Automation, School of Information Science and Technology, Vidyasirimedhi Institute of Science and Technology (VISTEC), Thailand): "Robot Sensors and Electronic circuit Design".
- 15. Mr. Worachit Ketrungsri, (2022–present, Research center for Advanced Robotics and Intelligent Automation, School of Information Science and Technology, Vidyasirimedhi Institute of Science and Technology (VISTEC), Thailand): "Medical Robotics".
- 16. Mr. Liu Yangjun, (2022–present, NEUTRON lab, Nanjing University of Aeronautics and Astronautics (NUAA), Nanjing, China): "Robot vision".
- 17. Mr. Arthicha Srisuchinnawong, (2020–2022, Research center for Advanced Robotics and Intelligent Automation, School of Information Science and Technology, Vidyasirimedhi Institute of Science and Technology (VISTEC), Thailand): "Adaptive Neural Control for Adaptive Pipe Climbing Robots". (2022–present, ENS Lab, University of Southern Denmark, Denmark): "Longterm autOnomy For service robots in consTruction (LOFT)".

#### **Postdocs:**

# Past projects:

- 1. Dr. Jan-Matthias Braun (2017–2019, University of Southern Denmark, Denmark): "Neural predictive information processing (part of the Plan4Act project)".
- 2. Dr. Danish Shaikh (2015–2017, University of Southern Denmark, Denmark): "Neural Predictive Control for Goal-directed Learning and Multi-scale Adaptation".
- 3. Dr. Xiaofeng Xiong (2018–2021, University of Southern Denmark, Denmark): "Neural navigation control (part of the Dlife project)".
- 4. Dr. Nat Dilokthanakul, (2018–2022, School of Information Science and Technology, Vidyasirimedhi Institute of Science and Technology (VISTEC), Thailand): "Deep reinforcement learning for cognitive robotics (part of the Bio-inspired Robotics project)".
- 5. Dr. Yang Li (2018–2022, Nanjing University of Aeronautics and Astronautics (NUAA), Nanjing, China): "Smart material for gecko-inspired robots (part of the NEUTRON project)".

# Current projects:

6. Dr. Sombat Ketrat, (2020–present, School of Information Science and Technology, Vidyasirimedhi Institute of Science and Technology (VISTEC), Thailand): "Robot and AI project management".