FH-Prof. Dr. Wilfried Kubinger

UAS Technikum Wien
Hoechstaedtplatz 6, A-1200 Vienna, Austria
+43-1-3334077-2584
kubinger@technikum-wien.at

Education:

Vienna University of Technology (Austria)
Doctorate in Electrical Engineering (with honor), 1999

Vienna University of Technology (Austria)
Graduate Engineer (Dipl.-Ing.) in Electrical Engineering, 1995

Technical College for Electronics St. Pölten (Austria)
A-Levels (with honor), 1988

Working Experience:

University of Applied Sciences Technikum Wien, Vienna, Austria (2020-)
Head of Department "Electronics Engineering"

- Head of Department "Electronics Engineering"
- Responsible for definition and management of electronics-related lectures as well as R&D programs at UAS Technikum Wien
- Senior lecturer and principal investigator for advanced sensor systems and mechatronics
- Responsible for definition, acquisition and conduction of public-funded (e.g., EU Horizon2020, FFG, FWF, …) as well as company-funded R&D projects

University of Applied Sciences Technikum Wien, Vienna, Austria (2018-2020)
Head of Competence Center and Thematic Coordinator "Automation&Robotics"

- Head of Competence Center "Automation & Sensor Technology" at the Department for Industrial Engineering
- Responsible for definition as well as management of robotics and automation R&D programs / activities at UAS Technikum Wien
- Senior lecturer and principal investigator for sensor- as well as automation-related technologies
- Responsible for definition, acquisition and conduction of public-funded (e.g., EU Horizon2020, FFG, FWF, …) as well as company-funded R&D projects

University of Applied Sciences Technikum Wien, Vienna, Austria (2016-2018)
Senior Researcher and Thematic Coordinator "Automation&Robotics"

- Responsible for definition as well as management of robotics and automation R&D programs / activities at UAS Technikum Wien
- Lecturer and principal investigator for sensor- as well as control-related technologies at Department of Advanced Engineering Technologies at UAS Technikum Wien
- Responsible for definition, acquisition and conduction of public-funded (e.g., EU Horizon2020, FFG, FWF, …) as well as company-funded R&D projects

University of Applied Sciences Technikum Wien, Vienna, Austria (2009-2016)
Program Director Mechatronics/Robotics

- Responsible for leading the mechatronics/robotics bachelor program
- Lecturer and principal investigator for sensor- as well as control-related technologies at Department of Advanced Engineering Technologies at UAS Technikum Wien
- Responsible for definition, acquisition and conduction of funded research projects (e.g., EU FP7/Horizon2020, FFG) as well as internal R&D programs

AIT Austrian Institute of Technology, Vienna, Austria (2003-2010)
Key Researcher and Research Project Manager

- Responsible for definition, acquisition and conduction of research projects (e.g. EU FP6/7) as well as AIT internal projects (e.g. screening of new research fields)
- Principal investigator for „embedded computer vision" - computer vision algorithms suitable for dependable embedded real-time systems
- Leaded a team of researchers and graduate/under-graduate students on „embedded computer vision" related projects; Annual budget approx. EUR 500k, 55% from external sources
- Member of SciAutonics/Auburn Engineering team participating both at DARPA Grand Challenge 2005 and Urban Challenge 2007; Main contribution was an Embedded Stereo Vision Sensor for Obstacle and Lane Detection

Siemens AG Austria, Vienna, Austria (2000-2003)
Development Project Manager and R&D Engineer

- Responsible for conduction of telecommunication related R&D projects
- Principle Engineer for Access Platforms, Board Support Packages
- R&D activities were mainly focused on embedded software for telecommunication products as well as on related test equipment

Institute for Flexible Automation, Vienna University of Technology, Austria (1996-2000)
Research and Teaching Assistant

- Lead of „Assembly Automation Group", a group of graduate and under-graduate students working on machine vision and industrial automation projects
- Main research areas were color image processing, real-time computer vision, and control techniques used in assembly automation

Research Interests:

- Computer Vision, 3D and Stereo, Machine and Robot Vision, Image Processing
- Mobile and Service Robotics, Autonomous Systems
- Embedded Systems, Dependable Embedded Real-Time Systems
- Advanced Sensor Systems
- Mechatronics, Control Theory

Language Skills:

- German (native), English (very good)

Additional Professional Activities:

- Member of the Program Committee of the annual Austrian Robotics Workshop
- Reviewer for various national and international scientific journals and conferences
- Session Co-Chair of various national and international conferences and workshops
- Guest Editor of 2013 International Journal of Advanced Robotics Systems: Vision Sensors
- Senior Member of IEEE, Member of IEEE Robotics and Automation Society
- Educational Activities Officer IEEE Austria, Vice-Chair of IEEE RAS Austrian Chapter
- Board Member of the Austrian Society for Metrology, Automation and Robotics (GMAR)

Selected Publications:

- M. Humenberger, Ch. Zinner, M. Weber, W. Kubinger, M. Vincze, *A fast stereo matching algorithm suitable for embedded real-time systems*, Computer Vision and Image Understanding, Volume 114, Issue 11, 1180-1202, November 2010, Special issue on Embedded Vision.
- K. Ambrosch, W. Kubinger, *Accurate hardware-based stereo vision,* Computer Vision and Image Understanding, Volume 114, Issue 11, 1303-1316, November 2010, Special issue on Embedded Vision.
- D. Baumgartner, P. Rössler, W. Kubinger, Ch. Zinner, K. Ambrosch, *Benchmark of Low-Level Vision Algorithms for DSP, FPGA, and Mobile PC Processors*, Embedded Computer Vision, Advances in Pattern Recognition Series, pp. 101-120, Springer London, 2008
- Ch. Zinner, W. Kubinger, R. Isaacs, *PfeLib - A Performance Primitives Library for Embedded Vision,* EURASIP Journal on Embedded Systems, vol. 2007, Article ID 49051, 14 pages, 2007
- W. Travis, R. Daily, D.M. Bevly, K. Knoedler, R. Behringer, H. Hemetsberger, J. Kogler, W. Kubinger, B. Alefs, *SciAutonics-Auburn Engineering's Low-Cost, High-Speed ATV for the 2005 DARPA Grand Challenge*, Journal of Field Robotics 23(8), 579–597, 2006

Vienna, November 5, 2020   W. Kubinger