Jan Schier – Curriculum Vitae

Education

- Ph.D. 1995 thesis: "Parallel Algorithms for Robust Adaptive Identification and Square- Root LQG Control Synthesis", supervisor Miroslav Kárný, DrSc., MSc., Czech Technical University, Faculty of Nuclear and Physical Science
- M.S.(Technical Cybernetics) 1989, Czech Technical University, Faculty of Electrical Engineering, Prague, Czech Republic

Research Employment

Current: research fellow Institute of Information Theory and Automa- tion, Academy of Sciences of the Czech Republic, Prague (since 1995)

1998 – 2002 reserach fellow Department Elektrotechniek (ESAT), Katholieke Universiteit Leuven (KUL), Belgium. Research and experimental fixed-point implementation of per-tone equalization algorithms for ADSL modems (research group of Prof. Marc Moonen)

1995 – 1997 Faculty of Electrical Engineering, Mathematics and Informatics (EWI), Delft University of Technology, the Netherlands. Several research stays with total length of 14 months. Research of signal processing algorithms for a multistatic FM-CW radar (in cooperation with the IRCTR laboratory)

Selected Research Projects

- BOREC – Color Image in Realtime Embedded Computing Duration: 2018 - 2020 TAČR TH03010330, 2018-2020 investigator
- GenEx - System for support of the FISH method evaluation TAČR TA01010931, 2011-2014 principal investigator

Professional activities

- 2018 Doctoral Consortium Chair, BIOSTEC conference, 2015 and 2014, Program co-chair of the BIOIMAGING conference, 2012 Program Chair of the BIOINFORMATICS 2012 conference (all organized by INSTICC, Portugal)
- Reviewer for the Journal of Real-Time Image Processing (Springer) (2007-now)

Dissemination activities

- Supervisor for an internship program for secondary-school students in the frame of the "Open science" program of the Academy of Sciences (Jan Schier has supervised some 15 students in the frame of this program).

In 2022, students Jan Slíva, Viktor Číhal and Tadeáš Fryčák are participating in the "Modern methods of digital image processing" internship, focused on application of convolutional networks in the light-sheet microscopy image processing, using data provided by the Institute of Animal Physiology and Genetics.

- Participation at the Science Fair popularization event.

Outcomes of the supervision of secondary-school students

- His students Jiří Wolker and Maria Šimůnková have won the 2020 Student conference in the "Formal Sciences" section with their work "Spindle segmentation in big image data using convolution network DenoiSeg".
- Jiří Wolker, under supervision of Jan Schier, has placed second in the INGENIUM category of the "Česká hlavička" competition in 2021, with his work "An interactive viewer of three-dimensional raster images". It's Czech competition rewarding talented secondary school students.
- The viewer is, as the HyperStackView utility, displayed for public use in the Python Package Index (PyPI) repository (December 2021)
- Jiří Wolker has succsessfully defended his final project "Graphical application for interactive display of 3D raster images" at the "SPŠ stavební akademika Stanislava Bechyně" secondary school (57 pages, May 2022)

Awards

Conference paper "Automated counting of yeast colonies using the Fast Radial Transform algorithm", jointly authored with Bohumil Kovář, has been awarded the Best paper award at the BIOINFORMATICS 2011 conference, organized by INSTICC.

Publications

See the full list of publications at
`https://www.utia.cas.cz/biblio?author=cav_un_auth%2A0101190`