

Lecture Notes in Artificial Intelligence

10607

Subseries of Lecture Notes in Computer Science

LNAI Series Editors

Randy Goebel

University of Alberta, Edmonton, Canada

Yuzuru Tanaka

Hokkaido University, Sapporo, Japan

Wolfgang Wahlster

DFKI and Saarland University, Saarbrücken, Germany

LNAI Founding Series Editor

Joerg Siekmann

DFKI and Saarland University, Saarbrücken, Germany

More information about this series at <http://www.springer.com/series/1244>

Somnuk Phon-Amnuaisuk · Swee-Peng Ang
Soo-Young Lee (Eds.)

Multi-disciplinary Trends in Artificial Intelligence

11th International Workshop, MIWAI 2017
Gadong, Brunei, November 20–22, 2017
Proceedings

Editors

Somnuk Phon-Amnuaisuk 
Universiti Teknologi Brunei
Gadong
Brunei Darussalam

Swee-Peng Ang
Universiti Teknologi Brunei
Gadong
Brunei Darussalam

Soo-Young Lee
Korea Advanced Institute of Science
and Technology
Daejeon
Korea (Republic of)

ISSN 0302-9743 ISSN 1611-3349 (electronic)
Lecture Notes in Artificial Intelligence
ISBN 978-3-319-69455-9 ISBN 978-3-319-69456-6 (eBook)
<https://doi.org/10.1007/978-3-319-69456-6>

Library of Congress Control Number: 2017956768

LNCS Sublibrary: SL7 – Artificial Intelligence

© Springer International Publishing AG 2017

This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, express or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Printed on acid-free paper

This Springer imprint is published by Springer Nature
The registered company is Springer International Publishing AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Preface

On behalf of the organizing committee, it is an honor and a great pleasure to welcome you to the 11th Multi-disciplinary International Workshop on Artificial Intelligence (MIWAI 2017) held from November 20–22, 2017, in Brunei.

MIWAI is an annual event, initiated back in 2007 in Thailand under the title “Mahasarakham International Workshop on Artificial Intelligence.” The event has evolved to be an international workshop with participation from around the world starting from 2011 where MIWAI was held in Hyderabad (India). Subsequently, the event was held in Ho Chi Minh City (Vietnam), Krabi (Thailand), Bangalore (India), Fuzhou (China), Chiang Mai (Thailand), and this year in Brunei.

MIWAI solicits papers from all areas of artificial intelligence. It aims to bring together researchers from around the world in the field of artificial intelligence, to exchange ideas, present recent results, and discuss possible collaborations. This year, the international Program Committee consisted of over 120 researchers from 30 countries. A total of 82 submissions from 30 countries were submitted to the event for double-blind peer-review. Of these, 40 submissions were deemed suitable for presentation and to be included in this book. The acceptance rate is around 49%. Besides the papers published in the proceedings, the technical program included two keynote speeches by Ah-Hwee Tan and Guang-Bin Huang, and three public lectures by Laszlo T. Koczy, Peter Haddawy, and Junmo Kim.

The host organization for MIWAI 2017 was the Centre for Innovative Engineering (CIE), one of the research units of Universiti Teknologi Brunei (UTB). The Organizing Committee wishes to express gratitude and appreciation to the following organizations: Springer, IEEE-Computational Intelligence Society, World Federation Soft Computing, and Brain Science Research Center (KAIST) for their technical support; the members of the MIWAI 2017 Program Committee for their time and invaluable effort in the double-blind peer-review process; the keynote speakers and public lecturers who generated an academically stimulating atmosphere; the MIWAI Steering Committee members and MIWAI conveners for their support and suggestions; the UTB advisory board and all members of the local Organizing Committee for their professional team work; and Universiti Teknologi Brunei for its institutional and various supports.

On behalf of the Organizing Committee, we would also like to express our gratitude to Hjh Zohrah binti Haji Sulaiman, our Vice Chancellor, for her guidance and support, which were essential to the success of this event. Finally, we would like to thank all the participants for taking an interest in MIWAI 2017.

September 2017

Somnuk Phon-Amnuaisuk

Swee-Peng Ang

Soo-Young Lee

Organization

Organizer

Centre for Innovative Engineering, Universiti Teknologi Brunei, Brunei Darussalam

Honorary Advisors

| | |
|--------------------------------|--|
| Hjh Zohrah Binti Haji Sulaiman | Universiti Teknologi Brunei, Brunei Darussalam |
| Sujin Butdisuwan | Mahasarakham University, Thailand |

MIWAI Steering Committee

| | |
|--------------------|--------------------------------------|
| Arun Agarwal | University of Hyderabad, India |
| C. Raghavendra Rao | University of Hyderabad, India |
| James F. Peters | University of Manitoba, Canada |
| Jérôme Lang | University Paris-Dauphine, France |
| Leon Van Der Torre | University of Luxembourg, Luxembourg |
| Patrick Doherty | University of Linkoping, Sweden |
| Rajkumar Buyya | University of Melbourne, Australia |
| Rina Dechter | University of California, Irive, USA |
| Srinivasan Ramani | IIIT Bangalore, India |

Conveners

| | |
|-------------------------|-----------------------------------|
| Richard Booth | Cardiff University, UK |
| Chattrakul Sombattheera | Mahasarakham University, Thailand |

UTB Advisory Board

| | |
|------------------------------|--|
| Noor Maya Binti Hj Md Salleh | Universiti Teknologi Brunei, Brunei Darussalam |
| Zuruzi bin Abu Samah | Universiti Teknologi Brunei, Brunei Darussalam |
| Ady Syarmin bin Hj Md Taib | Universiti Teknologi Brunei, Brunei Darussalam |
| Jennifer Hiew Lim | Universiti Teknologi Brunei, Brunei Darussalam |
| Hamdani Bin Hj Ibrahim | Universiti Teknologi Brunei, Brunei Darussalam |

Conference Committee

General Chairs

| | |
|-----------------------|------------------------------|
| Somnuk Phon-Amnuaisuk | UTB, Brunei |
| Soo-Young Lee | KAIST, Korea |
| Peter Haddawy | Mahidol University, Thailand |

Program Chairs

Swee-Peng Ang
Jonathan H. Chan
UTB, Brunei
KMUTT, Thailand

Publicity Chairs

Siti Asmahlati Bolkini binti
A. Haji Ahmad
Derong Liu
Laszlo T. Koczy
Seiichi Ozawa
Weng-Kin Lai
UTB, Brunei
Chinese Academy of Sciences, China
BME, Hungary
Kobe University, Japan
TARUC, Malaysia

Invited Session Chairs

Fushuan Wen
Shing-Chiang Tan
UTB, Brunei
MMU, Malaysia

International Program Committee

| | |
|--------------------------|--|
| Azizi Ab Aziz | Universiti Utara Malaysia |
| Arun Agarwal | University of Hyderabad, India |
| Grigoris Antoniou | University of Huddersfield, UK |
| Nureize Arbaiy | UTHM, Malaysia |
| S.M.N. Arosha Senanayake | Universiti Brunei Darussalam, Brunei |
| Adham Atyabi | Yale University, USA |
| Thien-Wan Au | Universiti Teknologi Brunei, Thailand |
| Joscha Bach | MIT Media Lab, USA |
| Costin Badica | University of Craiova, Romania |
| Sotiris Batsakis | University of Huddersfield, UK |
| Tarek Richard Besold | University of Bremen, Germany |
| Raj Bhatnagar | University of Cincinnati, USA |
| Antonis Bikakis | University College London, UK |
| Laor Boongasame | King Mongkut University of Technology Thonburi, Thailand |
| Tossapon Boongoen | Royal Thai Air Force Academy, Thailand |
| Veera Boonjing | King Mongkut's Institute of Technology Ladkrabang, Thailand |
| Richard Booth | Cardiff University, UK |
| Darko Brodic | University of Belgrade, Serbia |
| David Camacho | Universidad Autonoma de Madrid, Spain |
| Thanarat Chalidabhongse | Chulalongkorn University, Thailand |
| Rapeeporn Chamchong | Murdoch University, Australia |
| Dehua Chen | Donghua University, China |
| Zhicong Chen | Fuzhou University, China |
| Sung-Bae Cho | Yonsei University, Korea |
| Sook-Ling Chua | Multimedia University, Malaysia |

| | |
|--------------------------|---|
| Thien Pham Cong | Ho Chi Minh City - Nong Lam University, Vietnam |
| Broderick Crawford | Pontificia Universidad Catolica de Valparaiso, Chile |
| Minh-Son Dao | Universiti Teknologi Brunei, Brunei |
| Abdollah Dehzangi | University of Iowa, USA |
| Patrick Doherty | Linkoping University, Sweden |
| Abdelrahman Elfaki | University of Tabuk, Saudi Arabia |
| Worrawat Engchuan | Centre for Applied Genomics, Canada |
| Vladimir Estivill-Castro | Griffith University, Australia |
| Ibrahim Faye | Universit Tecknologi PETRONAS, Malaysia |
| Lk Foo | Multimedia University, Malaysia |
| Ulrich Furbach | University of Koblenz, Germany |
| Hock-Guan Goh | Universiti Tunku Abdul Rahman, Malaysia |
| Hui-Ngo Goh | Multimedia University, Malaysia |
| Bok-Min Goi | Universiti Tunku Abdul Rahman, Malaysia |
| Jinguang Gu | Wuhan University of Science and Technology, China |
| Jingzhi Guo | University of Macau, SAR China |
| Peter Haddawy | Mahidol University, Thailand |
| Wai-Lan Hoo | TARUC, Malaysia |
| Zhisheng Huang | Vrije University Amsterdam, The Netherlands |
| Jason Jung | Chung-Ang University, South Korea |
| Manasawee Kaenampornpan | Mahasarakham University, Thailand |
| Mohan Kankanhalli | National University of Singapore, Singapore |
| Kok-Chin Khor | Multimedia University, Malaysia |
| Ven-Jyn Kok | Universiti Kebangsaan Malaysia, Malaysia |
| Jérôme Lang | CNRS, LAMSADE, Université Paris-Dauphine, France |
| Idris Abdul Latiff | Universiti Kaula Lumpur, Malaysia |
| Phooi Yee Lau | Universiti Tunku Abdul Rahman, Malaysia |
| Kittichai Lavangnananda | King Mongkut's University of Technology, Thonburi, Thailand |
| Dianne Mei-Chong Lee | UiTM Negeri Sembilan, Malaysia |
| Yun-Li Lee | Sunway University, Malaysia |
| Chee-Kau Lim | University of Malaya, Malaysia |
| Chern-Hong Lim | TARC, Malaysia |
| Tiang-Hoo Lim | Universiti Teknologi Brunei, Brunei |
| Emiliano Lorini | IRIT, France |
| Martin Lukac | Nazarbayev University, Kazakhstan |
| Penousal Machado | CISUC, University of Coimbra, Portugal |
| Michael Maher | University of New South Wales, Australia |
| Sebastian Moreno | Universidad Adolfo Ibañez, Chile |
| Debjayoti Mukhopadhyay | Maharashtra Institute of Technology, Thailand |
| Raja Kumar Murugesan | Taylors University, Malaysia |
| Kavi Narayana Murthy | University of Hyderabad, India |
| Sven Naumann | University of Trier, Germany |
| Keng Hoong Ng | Multimedia University, Malaysia |

| | |
|--------------------------|--|
| M.C. Nicoletti | FACCAMP and UFSCar, Brazil |
| Shahrul Azman Noah | Universiti Kebangsaan Malaysia, Malaysia |
| Supakit Nootyaskool | King Mongkut's Institute of Technology Ladkrabang, Thailand |
| Worapat Paireekreng | Dhurakij Pundit University, Thailand |
| Kitsuchart Pasupa | King Mongkut's Institute of Technology Ladkrabang, Thailand |
| Laurent Perrussel | IRIT, Universite de Toulouse, France |
| Duc-Nghia Pham | MIMOS Berhad, Malaysia |
| Sheung-Hung Poon | Universiti Teknologi Brunei, Brunei |
| Mvnk Prasad | IDRBT, India |
| Wiboon Prompanich | King Mongkut's Institute of Technology Ladkrabang, Thailand |
| Tho Quan | Ho Chi Minh City University of Technology, Vietnam |
| Imran Rahman | Universiti Sains Malaysia, Malaysia |
| Vadlamani Ravi | Institute for Development and Research in Banking Technology, India |
| Andre Rossi | Université de Bretagne-Sud, France |
| Jose H. Saito | Universidade Federal de São Carlos, Brazil |
| Aknine Samir | LIRIS Laboratory, Lyon 1 University, France |
| Riyanarto Samo | Institut Teknologi Sepuluh Nopember, Indonesia |
| Myint Myint Sein | University of Computer Studies, Yangon, Myanmar |
| Ali Selamat | Universiti Teknologi Malaysia |
| S.H. Shah Newaz | Universiti Teknologi Brunei, Brunei |
| Peter D. Shannon | Universiti Teknologi Brunei |
| Jun Shen | University of Wollongong, Australia |
| Alok Singh | University of Hyderabad, India |
| Dominik Slezak | University of Warsaw and Infobright, Poland |
| Virach Sornlertlamvanich | SIIT, Thammasat University, Thailand |
| Frieder Stolzenburg | Harz University of Applied Sciences, Germany |
| Olarik Surinta | Mahasarakham University, Thailand |
| Ilias Tachmazidis | University of Huddersfield, UK |
| Soon-Jian Tan | Universiti Teknologi Brunei, Brunei |
| Jaree Thongkam | Mahasarakham University, Thailand |
| Supot Tiarawut | Chulalongkorn University, Thailand |
| Chuan-Kang Ting | National Chung Cheng University, Taiwan |
| Chau Vo | Ho Chi Minh City University of Technology, Vietnam |
| Chalee Vorakulpipat | NECTEC, Thailand |
| Junzo Watada | Waseda University, Japan |
| Ukrit Watchareeruetai | King Mongkut's Institute of Technology Ladkrabang, Thailand |
| Paul Weng | SYSU-CMU JIE, France |
| Kevin Wong | Murdoch University, Australia |

| | |
|-----------------------|--|
| Kuntpong Woraratpanya | King Mongkut's Institute of Technology Ladkrabang, Thailand |
| Chai Wutiwiwatchai | Human Language Technology Laboratory, NECTEC, Thailand |
| Li Xu | Fujian Normal University, China |
| Jingtao Yao | University of Regina, Canada |
| Wai Yeap | Auckland University of Technology, New Zealand |
| Vivian Suet-Peng Yong | Universiti Teknologi PETRONAS, Malaysia |
| Morteza Zaker | Amirkabir University of Technology, Iran |

Local Organizing Committee

Secretariat

Dk Norhafizah Binti Pg Hj Muhammad

Finance

Hjh Nur'azmina Hj Lingas

Registration

Ak Muhammad Rahimi bin Pg Hj Zahari

Event Organizer

Muhd Robin Yong Bin Abdullah

Publication

Uditha Ratnayake
Noor Deenina binti Mohd Salleh

Media and PR

Siti Noorfatimah Hj Awg Safar

Accommodation/Transportation

Hj Ismit bin Hj Mohamad

Health, Safety, and Environment

Zuliana binti Hj Nayan

Parking and Traffic

Muslim bin Hj Lakim

General Services

Mariatul Kiptiah Binti Ariffin
Muhammad Khairul Fadhli Bin Sani
Nur Amalina Binti Haji AbdManaf
Shiqah Natasya Binti Muhammad Hadi

Webhosting Contact

Panich Sudkhot MSU, Thailand

Contents

Knowledge Representation and Reasoning

| | |
|--|----|
| Inference and Learning in Probabilistic Argumentation | 3 |
| <i>Nguyen Duy Hung</i> | |
| Spatial Problem Solving in Spatial Structures | 18 |
| <i>Christian Freksa, Ana-Maria Olteteanu, Thomas Barkowsky, Jasper van de Ven, and Holger Schultheis</i> | |
| Transfer Learning-Based Case Base Preparation for a Case-Based Reasoning-Based Decision Making Support Model in the Educational Domain | 30 |
| <i>Pham Thanh Tri, Vo Thi Ngoc Chau, and Nguyen Hua Phung</i> | |
| Multi-level Search of a Knowledgebase for Semantic Parsing | 44 |
| <i>Anupiya Nugaliyadde, Kok Wai Wong, Ferdous Sohel, and Hong Xie</i> | |
| Design of a Cloud Brokerage Architecture Using Fuzzy Rough Set Technique | 54 |
| <i>Parwat Singh Anjana, Rajeev Wankar, and C. Raghavendra Rao</i> | |
| Generating Tutorial Interventions for Teaching Situation Awareness in Dental Surgery – Preliminary Report | 69 |
| <i>Narumol Vannaprathip, Peter Haddawy, Holger Schultheis, and Siriwan Suebnukarn</i> | |

Data Mining and Machine Learning

| | |
|---|-----|
| Validation of Machine Learning Classifiers Using Metamorphic Testing and Feature Selection Techniques | 77 |
| <i>Sadam Al-Azani and Jameleddine Hassine</i> | |
| Packer Identification Using Hidden Markov Model | 92 |
| <i>Nguyen Minh Hai and Quan Thanh Tho</i> | |
| AIC-Driven Spatial Hierarchical Clustering: Case Study for Malaria Prediction in Northern Thailand | 106 |
| <i>Peter Haddawy, Myat Su Yin, Tanawan Wisanrakkit, Rootrada Limsupavanich, Promporn Promrat, and Saranath Lawpoolsri</i> | |
| Multivariate Time Series Clustering Analysis for Human Balance Data | 112 |
| <i>Owais Ahmed Malik and Daphne Teck Ching Lai</i> | |

| | |
|--|-----|
| Analysis of District-Level Monsoon Rainfall Patterns in India: A Pilot Study | 126 |
| <i>Sougata Deb, Cleta Milagros Libre Acebedo, Jun Yu, Gomathypriya Dhanapal, and Niranchana Periasamy</i> | |
| Deep Learning and Its Applications | |
| Facial Expression Recognition Using a Hybrid CNN–SIFT Aggregator | 139 |
| <i>Tee Connie, Mundher Al-Shabi, Wooi Ping Cheah, and Michael Goh</i> | |
| Visual-Only Word Boundary Detection | 150 |
| <i>Muhammad Rizki Aulia Rahman Maulana, Retno Larasati, and Mohamad Ivan Fanany</i> | |
| Combination of Domain Knowledge and Deep Learning for Sentiment Analysis. | 162 |
| <i>Khuong Vo, Dang Pham, Mao Nguyen, Trung Mai, and Tho Quan</i> | |
| Hierarchical Attention Network with XGBoost for Recognizing Insufficiently Supported Argument | 174 |
| <i>Derwin Suhartono, Aryo Pradipta Gema, Suhendro Winton, Theodorus David, Mohamad Ivan Fanany, and Aniati Murni Arymurthy</i> | |
| Speed Invariant Bearing Fault Characterization Using Convolutional Neural Networks. | 189 |
| <i>Dileep Kumar Appana, Wasim Ahmad, and Jong-Myon Kim</i> | |
| Neural Network Control Method for Mobile Robot Trajectory Tracking. | 199 |
| <i>Pan Yang, Sheng Han, and Youfang Lin</i> | |
| What Does a Policy Network Learn After Mastering a Pong Game? | 213 |
| <i>Somnuk Phon-Amnuaisuk</i> | |
| Document Analysis | |
| Minimally-Supervised Sentiment Lexicon Induction Model: A Case Study of Malay Sentiment Analysis | 225 |
| <i>Mohammad Darwich, Shahrul Azman Mohd Noah, and Nazlia Omar</i> | |
| Analysis of the Reforming Languages by Image-Based Variations of LBP and NBP Operators | 238 |
| <i>Darko Brodić, Alessia Amelio, Radmila Janković, and Zoran N. Milivojević</i> | |

| | |
|---|-----|
| Usability Analysis of the Image and Interactive CAPTCHA via Prediction of the Response Time | 252 |
| <i>Darko Brodić, Alessia Amelio, Nadeem Ahmad, and Syed Khuram Shahzad</i> | |
| Generating Children's Stories from Character and Event Models. | 266 |
| <i>Bianca Trish Adolfo, Jerson Lao, Joanna Pauline Rivera, John Zem Talens, and Ethel Chua Joy Ong</i> | |
| Text Dimensionality Reduction for Document Clustering Using Hybrid Memetic Feature Selection | 281 |
| <i>Ibraheem Al-Jadir, Kok Wai Wong, Chun Che Fung, and Hong Xie</i> | |
| Intelligent Information Systems | |
| Location-Based Services for Surrounding Area with Myanmar Language on Mobile Devices | 293 |
| <i>Myat Thiri Khine and Myint Myint Sein</i> | |
| Processing and Monitoring Algorithm for Solar-Powered Smart Home in DC-Environment System Based on RF-Radio Node. | 304 |
| <i>A.H. Sabry, W.Z.W. Hasan, MZA Ab. Kadir, M.A.M. Radzi, and S. Shafie</i> | |
| GuARD: A Real-Time System for Detecting Aggressive Human Behavior in Cage Environment. | 315 |
| <i>Phooi Yee Lau, Hock Woon Hon, Zulaikha Kadim, and Kim Meng Liang</i> | |
| DREAD-R: Severity Assessment of ONOS SDN Controller | 323 |
| <i>Muhammad Shakil, Alaeldin Fuad Yousif Mohammed, Hyeontaek Oh, and Jun Kyun Choi</i> | |
| Formal Specifications and Analysis of an Agent-Based Model for Cognitive Aspects of Fear of Crime | 331 |
| <i>Azizi Ab Aziz, Ahmad Hanis Mohd Shabli, and Hayder M.A. Ghanimi</i> | |
| An Anytime Algorithm for Scheduling Tasks for Multiagent Systems | 346 |
| <i>Chattrakul Sombattheera</i> | |
| Hybrid Model with Margin-Based Real-Time Face Detection and Tracking | 360 |
| <i>Bacha Rehman, Ong Wee Hong, and Abby Tan Chee Hong</i> | |
| Smart LED Street Light Systems: A Bruneian Case Study | 370 |
| <i>Dk Nur Siti Khadhijah Pg Ali Kumar, Thien Wan Au, and Wida Susanty Suhaili</i> | |

| | |
|--|-----|
| Optimal Route Assessment for Emergency Vehicles Travelling on Complex Road Network | 380 |
| <i>K-zin Phyoe and Myint Myint Sein</i> | |
| Pasang Emas: An AI Implementation of Brunei's Ancient Traditional Game | 391 |
| <i>Pg. Hj. Asmali Pg. Badarudin</i> | |
| Swarm Intelligence | |
| Swap-Based Discrete Firefly Algorithm for Traveling Salesman Problem | 409 |
| <i>How Siang Chuah, Li-Pei Wong, and Fadratul Hafinaz Hassan</i> | |
| An Efficient New Memetic Method for the Traveling Salesman Problem with Time Windows | 426 |
| <i>Boldizsár Tüű-Szabó, Péter Földesi, and László T. Kóczy</i> | |
| A Novel Approach of Set-Based Particle Swarm Optimization with Memory State | 437 |
| <i>Michiharu Maeda and Takahiro Hino</i> | |
| A Spy Search Mechanism (SSM) for Memetic Algorithm (MA) in Dynamic Environments | 450 |
| <i>Stephen M. Akandwanaho and Serestina Viriri</i> | |
| Hybrid Simulated Annealing for the Bi-objective Quadratic Assignment Problem | 462 |
| <i>Mohamed Saifullah Hussin and Thomas Stütze</i> | |
| Solving the Manufacturing Cell Design Problem Using the Artificial Bee Colony Algorithm. | 473 |
| <i>Ricardo Soto, Broderick Crawford, Leandro Vásquez, Roberto Zulantay, Ana Jaime, Maykol Ramírez, and Boris Almonacid</i> | |
| Evolving 3D Models Using Interactive Genetic Algorithms and L-Systems | 485 |
| <i>Mariatul Kiptiah binti Ariffin, Shiqah Hadi, and Somnuk Phon-Amnuaisuk</i> | |
| Author Index | 495 |