SOCIAL ROBOTICS AND SMART SYSTEMS APPLICATIONS (SRSSA) RESEARCH GROUP

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Surya Hotel, Tretes, Jawa Timur
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About Social Robotics and Smart Systems Applications (SRSSA) RG

- Previously known as **Active Intelligent Systems Research Group (AIS-RG)**
- Established in 2019 (renamed in 2022)
- Active members:
  - 3 lecturers (1 senior (head) and 2 junior lecturers)
  - More than 10 applied master students/academic year
  - More than 20 applied bachelor students/academic year

Bima Sena Bayu D.
(Head/Researcher)

Bayu Sandi Marta
(Researcher)

Dewi Mutiara Sari
(Researcher)

Description

- **Social Robotics and Smart System Applications RG** is a group of research topics that emphasizes ***computer science and engineering*** approaches to solve engineering problems, especially in ***Social Robotic Applications and Smart Systems Applications***.
- Research area:
  - Signal, Vision and Graphics
  - Pattern Recognition & Artificial Intelligence
  - Localization and Mapping
  - Planning and Control
  - Robot applications
  - Human-Machine/Robot Interaction

Vision and Mission

- **VISION**

  To become a world-class research group in the field of social robotics and smart systems applications

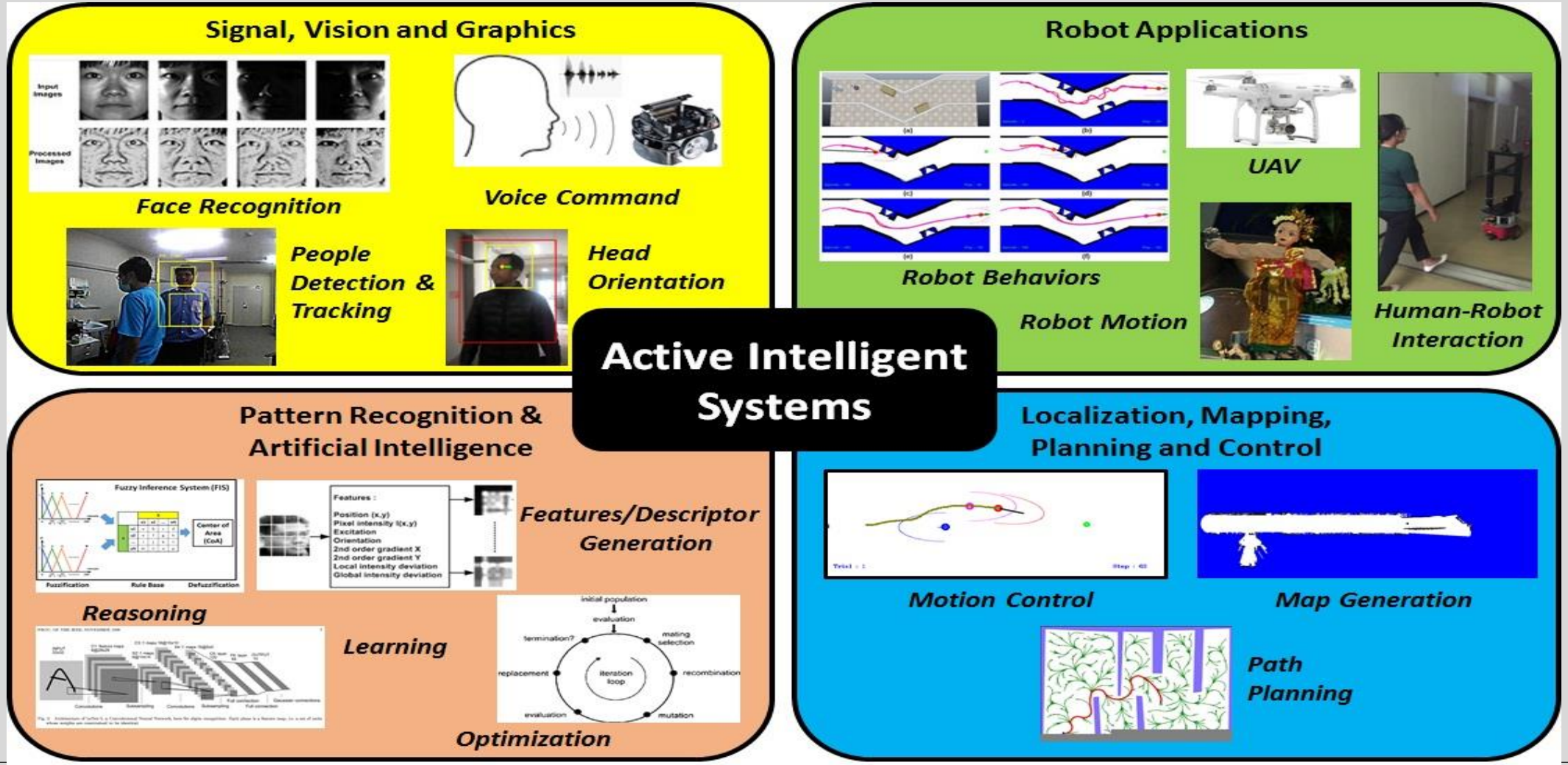
- **MISION**

  1. To become a place for the application of multi-disciplines in the scope of computer science and engineering to create products that are useful and of high technological value
  2. Spurring the growth of new technologies that are developed from a theoretical and practical perspective so that they can be implemented directly to have a positive impact on society
  3. Implementing new ideas and development to provide added value to technology products

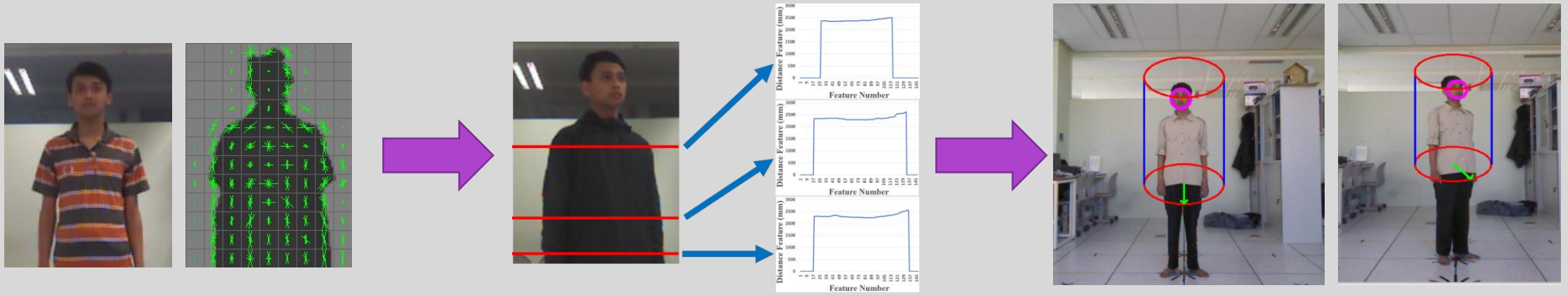
Purposes

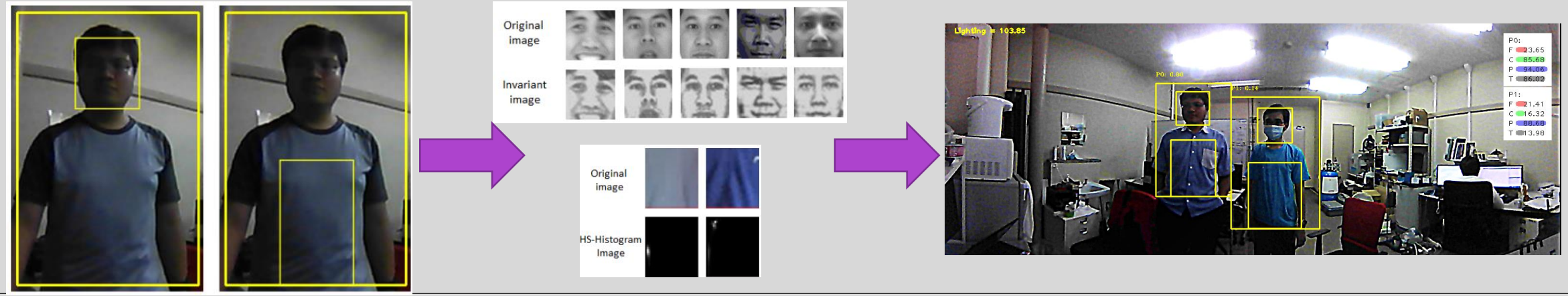
1. Carry out the development of knowledge that is theoretically or practically oriented which can have a positive impact on society.
2. Become a bridge for the application of multi-disciplines to create products that are useful and of high technological value.
3. Approaching the application of high technology to the wider community supported by new ideas and development to provide added value to technology products, especially in the fields of Electrical, Computer, Information Technology, Mechanics, etc.

Research Area



Our Scientific Researches





Our Scientific Researches

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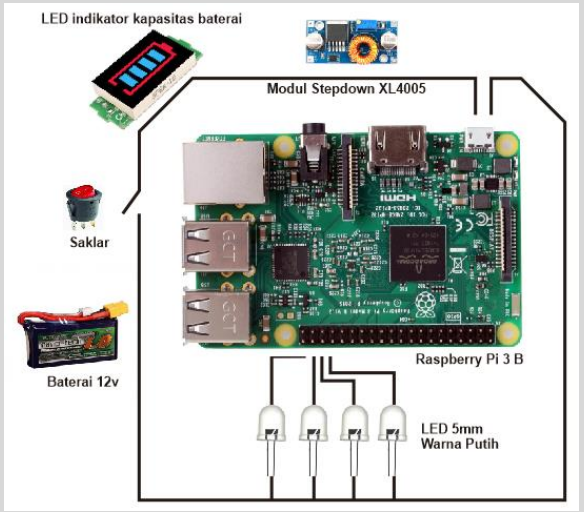
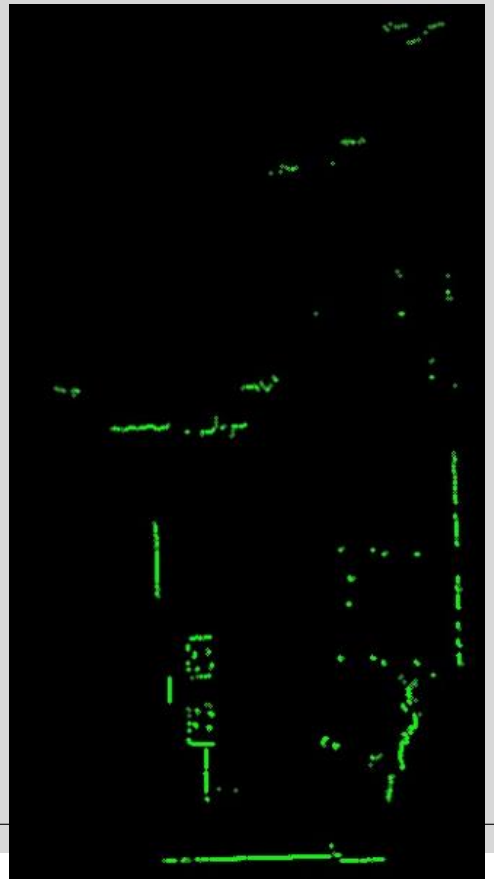
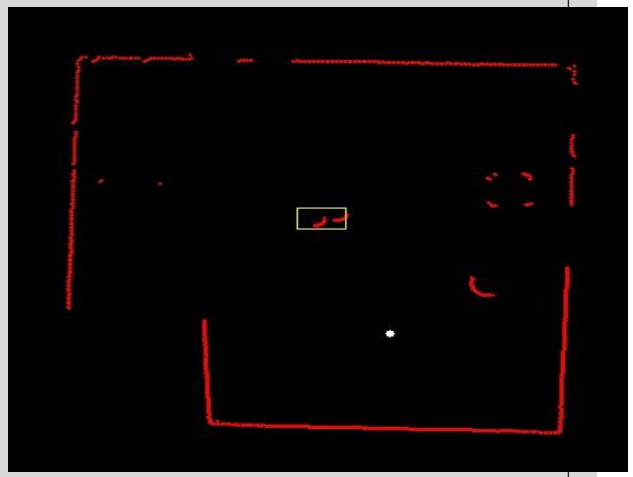


Kolaborasi dengan RG Aquaculture Eng.

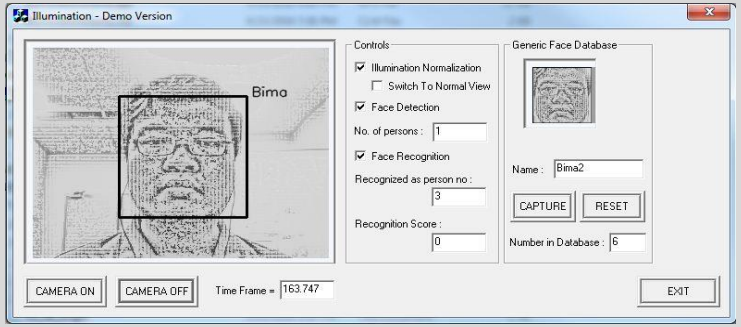


Scan Resul

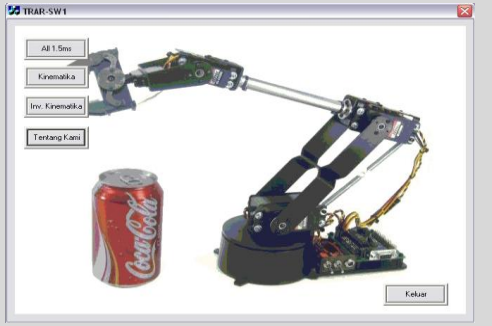


Research Products

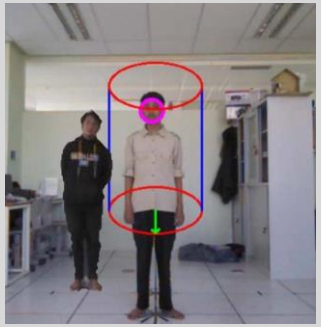
- 2 Patents
- 9 Copyrights
- Many Prototypes



Illumination Invariant Face Recognition



Manipulator Robot Control



Human Body Orientation

Social Trash Bin Robot

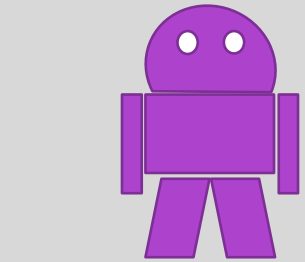
Mobile Arithmia's Early Warning Systems

CV-based Shrimp Counter

IoT-based Application for Food Recommendation

Guide Robot

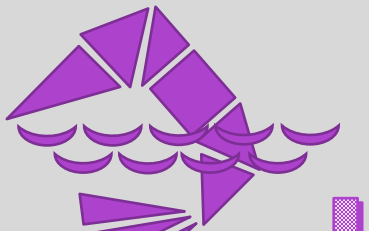
Our Contribution to RC and other RG



RoISC

1 international journals
4 national journals
11 international conf. papers

Social Robotics and Smart System Applications



Aquaculture

2 international journals
6 national journals
3 international conf. papers
1 paten + 1 HKI

Ersow

1 international journals
3 international conf. papers
2 national conf. papers

Achievements

- Publications:
  - International Reputable Journals: 10 (2022: 1)
  - National Accredited Journals: 32 (2022: 15)
  - National Journals: 2
  - International Conference Papers: 75 (8 best papers, 2022: 14)
  - National Conference Papers: 18
- Intellectual Property Rights:
  - Patent: 2
  - Copyright: 9
- Books:
  - Book: 3
  - Monograph: 1

Thank you