



Permata-Merdeka

# ROBOTIKA

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# PROFIL

- Programmer (Staf EDP) PT. Behaestex Gresik (1995-1996)
- Dosen dan Peneliti di STIKOM Surabaya Skrg. Univ. Dinamika (1996-2006)
- Dosen dan Peneliti di UPN “Veteran” Jawa Timur (2006-skrng)
- Founder i-ot.net
- ASIOTI, IAENG, & IEEE Member



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- Wakil Dekan 3 Fasilkom UPN “Veteran” Jawa Timur
- PIC Klaster Keilmuan Computer Science and Information Center Majelis Rektor Perguruan Tinggi Negeri Indonesia (MRPTNI)
- International Credit Transfer (ICT) Program Coordinator UPN “Veteran” Jawa Timur
- Ketua Pusat Studi Teknologi Informasi dan Komunikasi UPN “Veteran” Jawa Timur.



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## Research Group :

- IoT Research Group
- AI Research Group
- Drones and Robotics
- FishcareLab.

## Publikasi:

- <https://fitri.academia.edu/BasukiRahmat>
- [https://www.google.com/amp/s/www.researchgate.net/profile/Basuki\\_Rahmat2/amp](https://www.google.com/amp/s/www.researchgate.net/profile/Basuki_Rahmat2/amp)
- <https://scholar.google.com/citations?user=BjCi4AgAAAAJ&hl=en>
- <http://sinta.ristekbrin.go.id/authors/detail?id=5972549&view=overview>
- <https://www.scopus.com/authid/detail.uri?authorId=53264679500>
- <https://www.mendeley.com/authors/53264679500/>



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## Referensi :

- Pemrograman Robot Cerdas dengan Arduino :  
Dilengkapi Kamera Kinect Xbox 360,  
Pemrograman Deep Learning dengan Python dan  
Koneksi Internet of Things (IoT)
- <https://kursorjournal.org/index.php/kursor/article/view/242/122>
- Dan lain-lain





<https://shopee.co.id/Buku-PEMROGRAMAN-ROBOT-CERDAS-DENGAN-ARDUINO-i.78709625.4836708851>

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# **DEEP LEARNING-BASED OBJECT RECOGNITION ROBOT CONTROL VIA WEB AND MOBILE USING AN INTERNET OF THINGS (IoT) CONNECTION**

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# **MENGAPA BELAJAR ROBOTIKA?**





## Why Robot Research?

- Kontes Robot Cerdas Sebagai Kompetisi Bergengsi di Tingkat Nasional dan Dunia.
- Mahasiswa ingin mendapatkan tiket Go International melalui Kompetisi ini.
- Banyak peluang pemrograman sistem cerdas dapat diterapkan.



















Alfarobi Team  
**RAIH PERUNGGU**  
International Robot Competition 2014  
Humanoid Competition

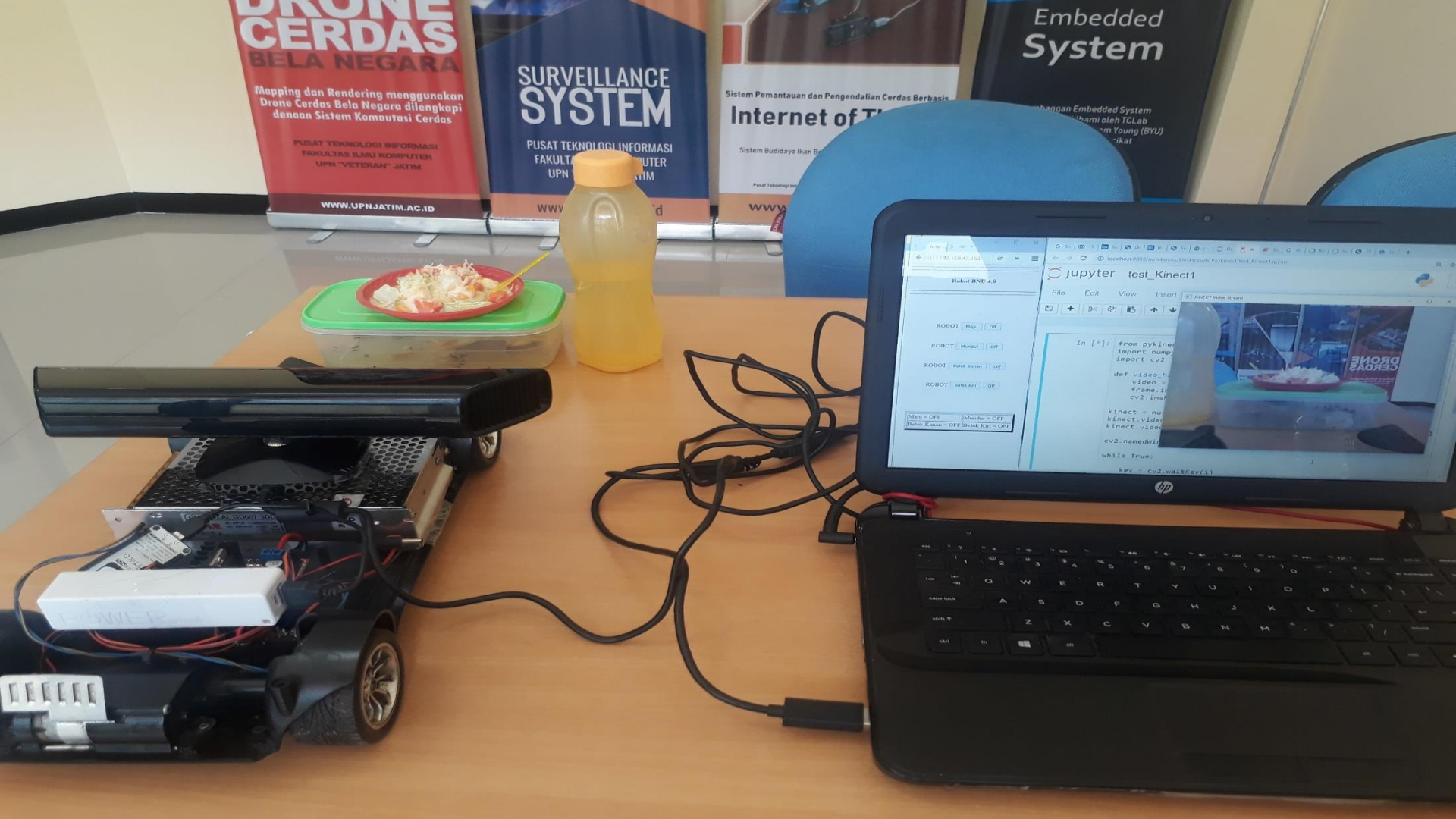




STUDI KASUS

# ROBOT BNU 4.0

ROBOT CERDAS PENGAWASAN BERBASIS DEEP  
LEARNING DAN INTERNET OF THINGS (IoT)



BNU07 | Arduino 1.8.9

File Edit Sketch Tools Help

BNU07

```
#define IN_1 D3 // Maju
#define IN_2 D4 // Mundur
#define IN_3 D7 // Belok Kanan
#define IN_4 D8 // Belok Kiri

WiFiServer server(80);

void setup() {
  Serial.begin(115200);
}
```

most compatible), 4M (no SPIFFS), v2 Lower Memory, Disabled, None, Only Sketch, 115200 on COM12

Jupyter Robot BNU 4.0 (autosaved)

File Edit View Insert Cell Kernel Widgets Help Trusted Python 3

Run

```
In [ ]: from pykinect import nui
import numpy
import cv2

def video_handler_function(frame):
    video = numpy.empty((480,640,4),numpy.uint8)
    frame.image.copy_bits(video.ctypes.data)
    cv2.imshow('KINECT Video Stream', video)

kinect = nui.Runtime()
kinect.video_frame_ready += video_handler_function
kinect.video_stream.open(nui.ImageStreamType.Video, 2,nui.ImageResolution.Resolu

cv2.namedWindow('KINECT Video Stream', cv2.WINDOW_AUTOSIZE)

while True:
```

xboxkinect-fig5.webp

Tampilkan semua

# SURVEILLANCE ROBOT BNU 4.0





**Terimakasih...**