

# Ali Anwar

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## EDUCATION

### HARBIN INST. OF TECH.

PHD IN CONTROL ENGINEERING  
 Expected Dec. 2018 | Harbin, CN

### MENG IN CONTROL ENGINEERING

Sept. 2013 - Jul. 2015 | Harbin, CN  
 Concentration. in Control Sc. & Engg.  
 School of Astronautics

### NATIONAL UNIV. OF SCIENCES & TECHNOLOGY

#### BENG IN ELECTRONICS

#### ENGINEERING

Nov. 2008 - Jul. 2012 | Islamabad, Pakistan  
 School of EE & CS

## LINKS

Github:// [denoza](#)  
 LinkedIn:// [alianwar1](#)  
 ResearchGate:// [ali\\_anwar9](#)

## SKILLS

### PROGRAMMING

Over 5000 lines:

C++ • Matlab •  $\text{\LaTeX}$

Over 1000 lines:

C • Python • Assembly • Ansible

Proficient:

Linux • GCC • CMake • SHELL

Libraries

OpenCV • Cafe • PCL • FLTK • ViSP

### LANGUAGES

Fluency

English • Urdu\Hindi

Limited Working Proficiency

Mandarin • German

### HARDWARE

Efort/Kuka/Universal Industrial Manipulator • Basler Industrial Cameras  
 • Microsoft Kinect



WeChat

## EXPERIENCE

### TRADEKEY (PVT). LTD | PROJECT MANAGEMENT EXECUTIVE

Jan. 2013 - Sept. 2013 | Karachi, Pakistan

- JD included Strategic Plans, Quarterly/Bi-Annual/Annual Closeouts, Support in QMS Audit, Monitoring and Control for VIP-SD Team, Standards and Documentation, Training and Development Plan for VIP-SD Associates, Process and Functional Development

## RESEARCH

### RESEARCH INST. OF INTELLIGENT SYSTEMS AND CONTROL, HARBIN INST. OF TECH. | PHD SCHOLAR

Sept. 2015 - Present | Harbin, CN

Worked in the research domain focused upon the visual servo control of industrial robots. Primary impact areas include computer programming of control algorithms and computer vision, design of state of the art robotics perception algorithms, and study of new ways to optimize the performance of visual servo control.

### HARBIN INST. OF TECH. AEROSPACE CENTER | POST-GRADUATE RESEARCHER

Sept. 2013 - Jul. 2015 | Harbin, CN

Investigated the nonlinearities affecting the system's control signal at the input. All of the major nonlinearities were covered including, backlash, dead-zone and input saturation. Their effects upon the attitude dynamics of rigid spacecrafts were studied and nonlinear control algorithms were designed for their mitigation.

## SELECTED PUBLICATIONS

- Anwar. A, Lin. W et al. "Recognition and Pose Estimation of auto-parts for a spray painting robot", IEEE Transactions of Industrial Informatics (*under peer review*)
- Anwar. A, Lin. W et al. "Remote Radio Unit Quality Inspection using Image based Visual Servo Control", IEEE Transactions of Industrial Electronics (*under peer review*)
- Anwar. A, Lin. W et al. "Remote Radio Unit Power Port Tracking using Computer Vision", IECON 2017 - 43rd Annual Conference of the IEEE Industrial Electronics Society, Beijing, 2017
- Anwar. A, Shao. X et al. "Adaptive backstepping control of uncertain nonlinear systems with input backlash", 2016 IEEE Chinese Guidance, Navigation and Control Conference (CGNCC), Institute of Electrical and Electronics Engineers (IEEE), Nanjing, 2016

## AWARDS

2015	Fully Funded PhD Scholarship	Harbin Inst. of Tech. (HIT)
2015	Top International Student	School of Astronautics, HIT
2013	Fully Funded PG Scholarship	Harbin Inst. of Tech.
2008	National ICT Scholar	National University of Sciences & Technology

## CERTIFICATIONS

- IELTS: 8.0 / 9.0
- Certified Associate of PLC and SCADA
- 2017 Summer School on Intelligent Robotics, Harbin Inst. of Tech.