# Muraleekrishna Gopinathan

**UAS/UAV Engineer** 

Experienced, organised Robotics Engineer with a background in systems engineering as well as training in Mechatronics Engineering. In possession of strong communication and leadership skills due to professional experience as a programmer and a mentor.

muraleekrishnagc@gmail.com

Australian Capital Territory, Australia

+61 468467963

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gmuraleekrishna

gmuraleekrishna

muraleekrishna.me

#### **WORK EXPERIENCE**

#### **Casual Session Academic**

Australian National University

ACT, Australia

02/2019 - Present

- Prepared and delivered course content and recommended changes to the academic committee
- Mentored students for successful completion of their academic project

Contact Dr Mahmoud Efatmaneshnik - m.efatmaneshnik@adfa.edu.au

## **Software Engineer**

Aconex India Pty Ltd

Bangalore, India

04/2017 - 09/2017

- Improved software development process by implementing XP techniques
- Designed, developed, deployed and maintained a multi-service large scale application of 1 million+ users

Contact Divin Paul - +61-413961232

#### **Software Programmer**

Multunus Software Pty Ltd

Bangalore, India

04/2014 - 03/2017

- Increased customer conversion ratio of our client by building a new intelligent recommendation system
- Designed, developed, tested and maintained software products across various domains and deliver working software every 2 days

Contact Akshay S Murthy - iamakshay@gmail.com

## **CERTIFICATES**

#### Robotics Specialization (12/2017 – Present)

Obtained 90% in the from University of Pennsylvania Coursera specialisation.

Image and Video Processing: From Mars to Hollywood with a Stop at the Hospital (11/2017)

Obtained 90.4% in Coursera course by Duke University.

Control of Mobile Robots (11/2017 – Present)

Obtained 82% in Coursera course by Georgia Tech

## **VOLUNTEER EXPERIENCE**

## **Student Support member & Tutor**

Make A Difference, India (02/2013 – 04/2014)

- Tutored class 10 students on Physics and Chemistry
- Improved graduation percentage of the orphanage by 30%

## **EDUCATION**

**Master of Engineering** 

02/2018 – Present

07/2010 - 05/2014

Australian National University Mechatronics Engineering

CGPA 6.12/7

Bachelor of Technology

Mahatma Gandhi University, India

Electronics and Communication Eng. CGPA 7.5/10

## **TECHNICAL SKILLS**

Field Robotics

Computer vision

C/C++/Python

System modelling

**Embedded systems** 

ROS

Systems engineering

**Control systems** 

## **ACHIEVEMENTS**

High achieving student of the District

Obtained 97% in Secondary School Leaving Certificate examination

Winner: District Basketball Championship (04/2019) *Placed 1st in the State Inter-school basketball competition* 

Best Photographer (05/2013)

Secured 1st place in college photography competition

Winner: Sub-District Mathematics Exhibition (06/2009)

Obtained A Grade in designing localisation system for naval applications

### **ACADEMIC PROJECTS**

Altitude control system design for High Power Rockets (08/2018 – 03/2019)

- Implemented control scheme to achieve competition altitude for a High power rocket and reduced apogee error to 3%

Real-Time Visual Odometry from Dense RGB-D Images (07/2018 – 11/2018)

- Implemented sensor fusion to combine dead reckoning and RGB-D images to map a robot's trajectory
- Improved localisation accuracy by using particle filter

## Semantic Scene labelling for road scene images (02/2018 – 06/2018)

- Conducted comparative study between different semantic segmentation algorithms and implemented SegNet deep neural network for segmentation

#### Autonomous Car (04/2013 – 03/2014)

- Implemented path planning and obstacle avoidance on a differential drive robot car sensor-fusing measurements from IMU and GPS