

andrey kudryavtsev

researcher/developer in computer vision and robotics



about

Age: 27

mail & web

andrey.kudryavtsev.24@gmail.com

🏠 avkudr.github.io

languages

russian: native

french: fluent

english: advanced

programming

C++

(opencv, visp, qt)

Java

MATLAB

JavaScript

(electron, node.js)

interests

computer vision, robotics, visual servoing, 3d reconstruction, automatic navigation, c++ and javascript programming, algorithms, problem solving

experience

since 2017

Post-doc in Medical Robotics

FEMTO-ST, Besançon, France

Project: control of a concentric tube robot (CTR) with SLAM using a camera installed in eye-in-hand configuration {

development of a new simulator for CTR using Electron/JS; path planning based on a 3D point cloud given by SLAM; implementation of the control law in C++

}

2014-2017

Ph.D. in Computer Vision

UBFC & FEMTO-ST, Besançon

University of Burgundy and Franche-Comte

Project: 3D Reconstruction in Scanning electron microscope {

set of algorithms for a special type of camera (affine camera): pose estimation, selfcalibration, etc. All of them are implemented in a software written in C++ with OpenCV & Qt

}

2014

Master+engineer internship (8 months)

FEMTO-ST, Besançon

Project: Visual servoing for automated assembly of microcomponents {

Control of the micromanipulation station using visual feedback from two cameras. Work on a pose-based algorithm of visual servoing for parallel projection cameras(C++ with OpenCV & ViSP)

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2010-2012

Development engineer (part time)

Kupol, Ivanovo, Russia

Project: Design and development of electronic control systems {

control systems for industrial equipment; electric circuits development: schematics and pcb; STM32 microcontroller programming (C++)

}

education

2012-2014

Engineer diploma in Mechatronics

École Nationale Supérieure de Mécanique et des Microtechniques
Besançon, France

2011-2012

M.Sc. in Automation and Control

Ivanovo State Power Engineering University (ISPEU)
Ivanovo, Russia

2007-2011

B.Sc. in Automation and Control

Ivanovo State Power Engineering University (ISPEU)

2008-2012

Translator (English) in professional communication

evening courses in ISPEU, Ivanovo, Russia