Ilkka Laine

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Objective

JdeRobot GSoC 2015 applicant. Focus on project 9: Object recognition using kinect2 device.

About Me

I'm studying Automation and Systems Technology at Aalto University(Former Helsinki University of Technology). I'm currently doing master's studies and I have about 200 credits in university studies.

I wrote my bachelor's thesis on a relevant topic, titled 'Segmentation and identification of objects in point clouds'. While writing my bachelor's thesis I familiarized myself with Point Cloud Library(PCL) and various depth sensing tehnologies and studied methods for identifying objects from point cloud data. So I know something about 3D computer vision, point clouds, keypoint extraction, features used for recognition and feature matching.

Coursework (this section became too long, feel free to skip)

Math:

Helsinki University of Technology's extensive version of basic math courses (30 cr).

Principles of modern analysis (5 cr.)

Discrete mathematics (5 cr.)

Two courses in statistics (10 cr.)

Programming:

Alternative extensive course in basic programming (16 cr.), which included basic programming, data structures and algorithms and two collaborative programming projects.

C-programming (6 cr.)

C++ -programming (4 cr.)

Software Design and Modelling (5 cr.)

Robotics:

Robotics (3 cr.)

Computer vision/perception:

Signal processing methods in automation (5 cr.)

General automation courses and a lab work involving computer vision topics

Other relevant studies:

Multiple courses on computer simulations.

My grades on programming courses are excellent(5). From other courses I have received all kind of grades, with an average about 3.

Experience

Programming:

I have been programming since I was a child, some 15 years ago. It started with making computer games, and I have made many small games over the years.

Programming languages I know:

I have pretty good grasp on C, C++, Java, Scala.

I have also used Scheme and Actionscript 3(flash).

Language skills

Finnish, native English, fluent Swedish, good German, basic

I don't know any Spanish, but perhaps now is the time to learn some.

Miscellaneus computer-related skills

Good LaTeX skills. XML schemas and such. Business process automation (Microsoft Biztalk).

Interests

Free software movement

Statement of intent

I would like to work on a free software project. JdeRobot is an interesting project and its topics are closely related to my studies.