Onur Berk Tore

Yeditepe University Istanbul

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EXPERIENCE

Summer Undergraduate

Koç University

2018

Research Assistant Robotics And Mechatronics Laboratory

Project Focus: Using image processing and matrix decomposition techniques to investigate the electrovibration effect. (Matlab, OpenCV, C++)

- Worked on the electrovibration effect on a haptic touchscreen interface and investigated the geometric transformations of the fingerprint under this effect.
- Showed the change in the shear strain values of fingerprint under the electrovibration effect.

Undergraduate Assistant

Yeditepe University

2018

Department of Computer Engineering

Erasmus+ KA203 Strategic Partnership Project

Title: Timeline Travel, An Alternative Tool for Architectural History Learning and Teaching More Info: timelinetravelproject.gantep.edu.tr

• Core developer of the team, worked together with a Ph.D. student to build TTravel tool, an interactive 2D dynamic map creation plugin designed for web. (JavaScript, PHP)

Undergraduate Research

Yeditepe University

2016-2017

Assistant (Volunteer)

Department of Computer Engineering

Project Focus: Using path finding and physic simulation to improve human-robot collaboration.

- Modify 2D physics engine.
- Implemented potential field and wavefront path finding algorithms in C++.
- Applied haptic rendering for rigid body simulation on Geomagic Touch devices.
- Performed teleoperation for haptic devices via connection over the network.

Student Lab Assistant

Yeditepe University

2016-2017

Department of Computer Engineering

Assisted undergraduate students during their lab sessions.

- Data Structures (CSE 211), C++
- Fundamentals of Computer Programming (CSE 114), C

B.Sc. in Computer Engineering

Yeditepe University, Istanbul Turkey Fourth Year

• Success Scholarship (covering 50% of tuition fees), CGPA: 3.33/4.00

PROJECTS

Summer Study

- Markerless gesture control of a mobile robot, C++, ROS, Ubuntu, Leap Motion SDK.
- Real time person tracking and following, OpenCV, KFC algorithm.
- Line follower mobile robot via IR and buffer sensors.

Course Projects

- Operating Systems Design: Modification to Linux 2.4 kernel scheduler and performance analysis of the new scheduler, C.
- Introduction to Artificial Intelligence: Implementation of minimax algorithm with alpha beta pruning to checkers-like game, C++.
- Computer Security: Implementation of authentication, confidentiality and compression services to file transfer application, Java.
- Data Communications and Computer Networks: Transport layer anonymization of video broadcast application, Java, C.
- Programming Languages: JSON to XML converter, Lex, Yacc, C.
- Data Structures: Huffman algorithm for txt files, C++.
- Systems Programming: M6800 Assembly interpreter, C.
- Software Testing: Applied Code Inspection, Desing by Contract analysis, Code-coverage tests, Equivalence tests and Unit tests on a Java class.

CORE SKILL SET

- Languages: C++, C, Java, Python, MySQL, Matlab, Javascript, PHP
- Software: ROS, Gazebo, Weka, OpenCV, OpenHaptics, OpenInventor, Visjs, Leaflet, Leap-Motion SDK, SUMO, Boost, Bootstrap

LANGUAGES

- Turkish: Native Language
- English: C1 CEFR (TOEFL: 103/120, IELTS: 7.5/9.0)

ADDITIONAL EXPERIENCE

- Member of the Yeditepe University Robotics and Intelligence System Labarotory, 2016-2017
- Board member of University Debate Society, 2015-2016
- Library Assistant at Yeditepe University, 2015-2016

REFERENCES

Dr. Ayşe Küçükyılmaz

Lecturer(Assistant Professor), University of Lincoln

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