GUSTAVO ADRIAN RUIZ SANCHEZ

Residence: Daegu, South Korea.

Visa: Long-term Resident (F-2)

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LANGUAGES

- Spanish   Native Language
- English   TOEFL iBT – 103 Points
- Korean   TOPIK II – 4급
- Japanese   JPLT4

WORKING EXPERIENCE

Keimyung University   Assistant Professor

Department of Computer Engineering   Mar. 2018 –

Teaching responsibilities:

- Graduate courses: Programming languages seminar, Object-oriented software, Data mining, Computer systems.
- Undergraduate courses: Python programming, Java programming, Introduction to object-oriented programming, C Programming, Webpage construction, Data Structures 1 & 2, Introduction to Computer Science, Digital logic circuits.

Standing Egg   Senior Research Engineer

Seoul, Korea.   Jul. 2015 – Jul. 2017

Work responsibilities:

- Implemented a 3, 6 and 9-axis sensor fusion (accelerometer, gyroscope and magnetometer) C library making use of the extended Kalman filter.
- Developed an indoor localization system based on dead reckoning technique utilizing a foot mounted inertial measurement unit (IMU).
- Developed inertial-optical sensor fusion algorithm, and PC client program for virtual reality headset tracking.

Robotics & Mechatronics Laboratory (RML)   Engineer Intern

The George Washington University   Oct. - Dec. 2010

Washington D.C., USA.

Polytechnic University of Chiapas   Robotics Instructor

Tuxtla Gutierrez, Chiapas, Mexico.   May. - Aug. 2010

EDUCATION
Yonsei University (Scholarship Holder)   GPA <u>4.16 / 4.3</u>
Master degree in Computer Science   Mar. 2013 – Aug. 2015
Computer Vision & Pattern Recognition Lab.

Yonsei University (Scholarship Holder)   *Level 1 – Level 4*
Korean Language Institute   Sept. 2011 – Mar. 2013

Washington Center for Internships and Academic Seminars   (Scholarship Holder)
Governors Program   Washington D.C., USA.
Fall Semester 2010   <u>Certificate of outstanding performance</u>

Polytechnic University of Chiapas   GPA <u>92.11 / 100</u>
Bachelor of Engineering   Aug. 2006 – Aug. 2010
Major: Mechatronics   Tuxtla Gutierrez, Chiapas,
Mexico.

PUBLICATIONS
- **"Development of an image processing-based ball tracking program for table tennis",** Korean Journal of Sports science 2020, Vol.21. No. 2, 180-188. Je-heon Moon, Seung-Lee, Ju-sung Lee, Panday Manish, Gustavo Ruiz, Siddhartha Bikram Panday.
- **"A Computer Vision-Based Banknote Recognition System for the Blind with an Accuracy of 98% on Smartphone Videos",** J. Korea Soc. Comput. Inf., vol. 24, pp. 67-72, Jun. 2019. Gustavo Ruiz.
- **"Real-time Detection of Speed-Limit Traffic Signs on The Real Road using Haar-like Features and Boosted Cascade",** ACM IMCOM 2014, Cambodia. Taewoo Lee, Byongdae Woo, Kwangyong Lim, Gustavo Ruiz, Yeongwoo Choi, Won J. Jeon, Hyeran byun.

RESEARCH PROJECTS
- **"In preparation for the Tokyo Olympics 2020 - Development and application of a program from automatic tracking of the trajectory of a weightlifting barbell"**, Korea Institute of Sport Science. Taewan Kim, Jun-Beom Song, Je-heon Moon, Gustavo Ruiz et al. Dec. 2020.
- **"Prediction of ground reaction forces during human gait using an artificial neural network"**, Korea Institute of Sport Science. Je-heon Moon, Siddhartha Bikram, Gustavo Ruiz et al. Dec. 2020.

SCHOLARSHIPS
- **Korean Government Scholarship** Program to go from Mexico to South Korea to study a Master's degree in Computer Science.
- **Mexican Government Scholarship** to study and do an internship in Washington, D.C.

RECOGNITIONS
- **3rd place** at the **"Intel® IoT Roadshow Hackathon"**, Dec. 20-21 2014, Seoul, South Korea.
- **Academic Excellence Award**, Yonsei University, Feb. 2014, Sept. 2014 and Feb. 2015.
- **6th place** at the **"2010 VEX Robotics College Challenge World Championship"**, April 22-24, 2010, Dallas, Texas, USA.

VOLUNTEERING

- **Section Leader of CS106A Code in Place**, Stanford University, Apr. - May 2021, remotely.
- **USA Science & Engineering Festival,** Oct. 23-24 2010, Washington D.C.