

NG UYEN CO NG TH ANH

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**Objective**Master Application **Education**

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| October 2013- August 2017 | **Kyushu University, School of Engineering,** Japan **International Undergraduate Program in English** Mechanical Engineering and Aerospace Engineering Course GPA: 3.64/4.0 |
| December 2012- April 2013 | **Vietnam National Economics University**, Vietnam School of Economics |
| October 2009- June 2012 | **High School for Gifted Students, Hanoi University of Science,** Vietnam  High School Diploma: 9.0/10 (Excellent) |

# Graduate Research

Research Theme: A study on artificial robotic arm Supervisor: Kazuo Kiguchi

“Controlling of wrist pronation/supination and flexion/extension motions for the trans- humeral prosthesis by using EEG signal (brain signal)’’.

To estimate the wrist pronation/supination and flexion/extension from the brain signal, which is collected from 16 channels, located on the scalp. After the experiments, there are two data collected: EEG signal from 16 channels as the input and wrist real angles measured from the marker and sensor when the subject perform those movements as the target. First of all, LDA (Linear Discrimination Analysis) module was built to select combination of which channel is more related to pronation/supination and combination of which channel is more related to flexion/extension movement with 60% data for training and 40% data for testing (20% for cross-validation and 20% for testing). Then that combination of those channels was used through the ANN (artificial neural network) to estimate the wrist angles with 60% data training (to build the ANN module: input EEG signal, target wrist real angle) and 40% for testing (20% for cross-validation and 20% for testing). Through the ANN module, we have the estimated wrist angles. We compared this estimated wrist angle with the wrist real angles to see the result of estimation or prediction of movement from the brain signal. In this thesis, the new research is LDA module for channel selection and trying to estimate two DOF at the same time. Whereas the existing method is successful to estimate 1DOF.

Journal Paper: Submitted a paper as the second author. The paper is currently under review.

# Work and Training

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| September 2017-Present | **FPT software Company, Vietnam** AI/BigData Engineering |
| April 2016- August 2017 | **Student Researcher,** System Engineering Laboratory Department of Mechanical Engineering, Kyushu University, Japan |
| February 2015- March 2015 | **Student Intern**, Denso Manufacturing Company - Design Centre, Vietnam |
| January 2015- August 2017 | **Tutor for Undergraduate Engineering Students**, Kyushu University  Subjects: Calculus, Mechanics, Strength of Material, Linear Algebra, Ordinary Differential Equation |
| April 2015- April 2016 | **Member of Kyushu University ROBOCON Team (KURT)** joining Japanese national TV program’s Robocon contest in Japan belonging to ABU Robocon contest an Asian Oceanian  College Robot Competition |

**Awards and Scholarship**

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| October 2013 – August 2017 | **Japanese Government Scholarship** |

**Leadership and Activities**

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| September 2016 | **Vice-chair of Public Relation Committee/Vice-chair of Logistic Committee**  Conference VJSE 2016: 9th Vietnamese-Japanese Student’s  Scientific Exchange Meeting. |
| January 2016- January 2017 | **Executive Committee Member**  Kyushu University Foreigner Student Association |
| August 2015-August 2016 | **Executive Committee Member/Vice-president of Campus** Vietnam Youth Student in Fukuoka Committee |
| October 2016- Present | **Striker** at Inter Fukuoka Football Club in Fukuoka League B |
| July 2015, July 2016 | **Leader of Kyushu University Team** in International Student Sports Festival in Fukuoka, Japan |
| October 2015 | **Beach Cleaning Volunteer** and Participants of Marines Debit Workshop- Iki Island, Japan |
| May 2015 | **Volunteer**, Nepal Earthquake Fundraise at Kyushu University, Japan |

**Skills**

**Language**: Vietnamese (Native)/English (Advanced, IELTS: 6.5 [November 26th, 2016])/ Japanese (Intermediate)

**Computer skills:** Microsoft Office, Photoshop, Lightroom **Engineering Skills**: CAD, CREO 3.0.

Programming java, Fortran, Matlab, EEGlab, Microsoft Azure, Spark, Kafka, Hadoop.

**Certificate**: Machine Learning (Coursera)

# Others

Avid interested in sports such as football, badminton, volleyball, table tennis; have participated in and won numerous sports events at colleague and city level.