VU MINH CHIEN
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EDUCATION BACKGROUND

TOHOKU UNIVERSITY **Sendai City, Japan**
Ph.D. student – Major: Interdisciplinary Studies of Civil and Environmental Science **October 2017 – present**
Beneficiary of MEXT scholarship for research student

・Research on the investigation of Strength performance of Geopolymer-based Modified Sludge desingning by DOE statistical theory under several conditions, propose the process for in-situ utilization, and building the prediction model for further application.

TOHOKU UNIVERSITY **Sendai City, Japan**
Master of Interdisciplinary Studies of Civil and Environmental Science **October 2015 – September 2017**
Beneficiary of MEXT scholarship for research student

・Research on the Effect of chemical componants on Geopolymer material to improve sludge in Disaster site for prompt recovery, analysis result by hypothesis statistic testing methods (ANOVA, Bootstrap) and Linear regression model.

BACH KHOA UNIVERSITY **Ho Chi Minh city, Viet Nam**
(former name: Ho Chi Minh University of Technology) **September 2010 – April 2015**
Bachelor of Civil Engineering

・GPA 8/10

WORK EXPERIENCE

Vuong Hai Distribution Corporation **Ho Chi Minh city, Viet nam**
Collaboration project and Marketing Internship **April 2014 – March 2015**

・**Conducted research** on developing the adhesive material for Autoclaved Aerated Concrete (AAC) and propose the idea in improving the production process to reduce 10% of overall price. Learn and examined the new method to produce the new kind of AAC brick to reduce the cost by waste product from industry.

・**Market research:** Successfully acquired the knowledge of practical market analysis and selling for new products of civil materials; and contributed to the market expansion of the new product launch. Successfully intruded new product into more than 100 small private sales in Ho Chi Minh city. Achievement: 25% of small private sales agree to sign the contract with the company.

Wacker Chemical (South Asia) **Ho Chi Minh city, Viet nam**
Collaboration project: Market and Technical Research **October 2013 – March 2014**

・**Business Intelligence**: analyzed and classified the behavior of the users and sellers using Decision tree model to classify the target of a new product and supported the marketing strategy decision of management board for the product portfolio in order to maintain the market share in adhesive, waterproof product and achieve KPIs of new product launch.

・**Technical Research**: research, propose and develop the waterproof and adhesive material application process for lightweight material in Viet Nam environment using production of company. Delivered analysis result and business recommendation to Board of Management.

AWARD, CERTIFICATION AND LANGUAGE SKILL

AWARD:	A beneficiary of Japanese Government MEXT Scholarship for Research student from October 2015 to September 2020
CERTIFICATION	Data Scientist with Python (DataCamp); Neural network and Deep learning (Coursera); Machine learning – Stanford University

TECHNICAL SKILL:	**Python, MySQL:** EDA, Supervised, Unsupervised, Deep learning, Data visualization, Feature transform and extraction **Microsoft Excel, Word, Powerpoint**: Proficient **Octave, Matlab:** Data structure, Applied mathematic algorithm **Javascript:** Principal knowledge
LANGUAGE	**English:** Fluent level (TOIEC 850) **Japanese:** N3 **Vietnamese:** Native level

CONFERENCE AND PUBLICATION

Publication	- Advanced Experimental Mechanics Journal. Vol.2 (2017), 168-173. Title: Study on Effect of Chemical Composition of Geopolymer to Improve Sludge by Using Fiber Materials - International Journal of the Society of Materials Engineering for Resources, Vol. 23, No.2, September 2018, 203-209. Title: Study on Weak Soil Improvement by Using Geopolymer and Paper Fragments - Construction and Building Materials, Volume 235. Title: Influence of initial water, moisture, and geopolymer content on geopolymer modified sludge
Conference (Oral)	- November 1st - 4th, 2016: The 11th International Symposium on Advanced Science and Technology in Experimental Mechanics, Ho Chi Minh, Viet Nam. Title: Study on application of Geopolymer for Fiber-Cement-Stabilizes soil method to modify the sludge generated in the landslide - March 10th, 2017: The 7th Vietnam/Japan Joint Seminar on Geohazards and Environmental Issues, Kyoto, Japan. Title: Study on development of new fiber-geopolymer-stabilized soil method to improve the sludge generated in disaster site - September 15th, 2018: Vietnam - Japan Scientific Exchange Meeting 11th, Sendai, Japan. Title: Effect of initial curing time, initial water and geopolymer to improve sludge - January 20th, 2018: International Environmental Leadership Program Symposium - Tohoku University, Japan. Title: Modeling the effect of geopolymer on improvement the characteristic of sludge - October 30th – November 1st, 2019: Cigos 2019 – Innovation For Sustainable Infrastructure, Ha Noi, Viet Nam. Title: Properties of geopolymer modified sludge generated in landslide area designed by Taguchi method.
Conference (Poster)	- October 25th - 27th, 2017: The Eighth International Conference on Materials Engineering for Resources, Akita, Japan. Title: Study on the Durability of Weak Soil Improvement by Using Geopolymer and Paper Fragments

SELF INTRODUCTION AND MOTIVATION

MOTIVATION I have 4 years experience in research, data collection and analysis; determination the problems through testing and visualizing the performance; design of experiment using DOE statistic theory to maximize the amount of obtained information; using statistic hypothesis testing to evaluate the results and anomaly detection; applying the machine learning models (linear regression, decision tree) to identify which feature is the utmost, which feature can satisfy the target values and predict the result for further application. Among these models, to define the model that works well with the dataset and generates better prediction in future applications, I altered the hyper-parameter of each model and measure their goodness of fit.

Throughout my research, I faced many failures and stuck several times but I was learned a lot from these and continued to improve my work as well as myself in every moment. Currently, I have already suggested the Geopolymer green material to reduce the adverse effect of construction to environment and keep studying to propose the process to optimize the application of the Geopolymer on the real site.

FUTURE PLAN:	Continue to develop a career in Data Science field in Japan after graduation and seek to work for an open-working and innovating company. **Area of interests:** Recommendation system, Data mining, Nature language process, the Optimization system, Sustainable material and energy

END OF RESUME