

Jimson Gelbolingo Ngeo Information Science Engineer

Address

Chiba-ken Chiba-shi Mihama-ku Masago 5-16-4-401

Experience

2016 - present

Operations Engineer

Weathernews, Inc., Japan

Provides 24/7 weather communication setup to marine vessels around the world to ensure safe and efficient operations through weather data-driven technological solutions.

Tel

+81 80 4240 0512

2017 - 2018 **Technology Consultant**

Ximity Inc., Philippines

Supports product development of next generation Internet-of-Things (IoT) applications for the Philippine market, mainly focusing on Low Power Wide Area Network (LORAWAN) applications.

Mail

jimsonngeo@ gmail.com

> 2014 - 2016 **Special Researcher**

Kyushu Institute of Technology, Kitakyushu Japan

Under the Human and Social Intelligence Systems Lab, trained PhD and Master students in machine learning applications and handling of specialized equipment. High experience in working with Gaussian Processes, Neural Networks and time-series and spatial-temporal data.

Web

https://linkedin.com/ in/jngeo/

> Skills 2008 - 2010 **Assistant Instructor**

Ateneo de Manila University, Philippines

Under the Department of Electronics, Computer and Communications Engineering, taught undergraduate courses in mathematics, telecommunications and electronics. Led research groups in developing biomedical applications.



Optimi-Signal **Processing** Statistical **Analysis**

Education

2013 - 2016 PhD in Information Science

Nara Institute of Science and Technology, Japan

Conducted research and published several articles and journals in Biomedical and Neuro-Engineering, specifically on Modeling dynamic and high degreeof-freedom finger kinematics from surface electromyographic (EMG) signals. Specialization is on machine learning, signal processing and sensors.

Programming

Matlab • Python

C\C++ • QT

Sensor Fusion

HTML • LATEX

2011 - 2013

Master in Information Science

Nara Institute of Science and Technology, Japan

Conducted research and published academic papers in Rehabilitation and Neuro-engineering, specifically on continuous estimation of finger joint angles

using muscle activation inputs from EMG signals.

2010 Japanese Language Training Course Osaka University, Japan

Participated in an intensive Japanese language course for beginners in preparation for graduate school.

2003 - 2008 BS in Electronics and Communications Engineering

Ateneo de Manila University, Philippines



Publications

J. Ngeo, T. Tamei and T. Shibata

Continuous and simultaneous estimation of finger kinematics using inputs from an EMG-to-muscle activation model

In: Journal of NeuroEngineering and Rehabilitation, 11:122, 2014

J. Ngeo, T. Tamei, K. Ikeda and T. Shibata

Modeling dynamic high-DOF finger postures from surface EMG using nonlinear synergies in latent space representation

In: Proceedings of the 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Milano, Italy, Aug 25–29, 2015

N. Koganti, J. Ngeo, T. Tamei, K. Ikeda and T. Shibata

Cloth dynamics modeling in latent spaces and its application to robotic clothing assistance In: IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 15), Hamburg, Germany, 2015

J. Ngeo, T. Tamei and T. Shibata

Estimation of continuous multi-DOF finger joint kinematics from surface EMG using a multioutput GP

In: Proceedings of the 36th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Chicago, USA, Aug 26–30, 2014

- J. Ngeo, T. Tamei, T. Shibata, M.F. Orlando, L. Behera, A. Saxena and A. Dutta **Control of an Optimal Finger Exoskeleton based on Continuous Joint Angle Estimation from EMG signals** *In: Proceedings of the 35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Osaka, Japan, Jul 3–7, 2013*
- J. Ngeo, T. Tamei and T. Shibata

Continuous Estimation of Finger Joint Angles Using Muscle Activation Inputs from Surface EMG Signals

In: Proceedings of the 34th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), San Diego, USA, Aug 28–Sep 1, 2012

Honors & Awards

2015	IROS 2015 Best Application Paper Award Title:Cloth dynamics modeling in latent spaces and its application to robotic clothing assistance. In: IEEE/RSJ International Conference on Intelligent Robots and Systems
2015	IEEE-EMBS Summer School 2015 Paper Title:Continuous and simultaneous estimation of finger kinematics using inputs from an EMG-to-muscle activation model
2010 - 2016	Japanese Government ScholarshipResearch, M.S. and PhD ScholarshipsGranted by the Monbukagakusho Scholarship Program
2012	Creative and International Competitiveness Project 2012 2nd Prize Entry: An Anonymous and Intelligent Message Broadcasting Service for smartphone and handheld game console users, details here
2010	Hapinoy Fisherman Breakthrough Innovation 3rd Prize Entry: Hapinoy Tingi Tawag Abroad (VOIP call station) for Philippine communities with insufficient IT infrastructure, details here
2008	4th Smart Wireless Engineering Education Program (SWEEP) Award 3rd Prize Project on Smart Guards, a disease and epidemic tracking and alert system