Titipat Achakulvisut

PERSONAL INFORMATION	PhD Candidate Department of Bioengineering University of Pennsylvania 106 Hayden Hall, 240 S 33rd St, Philadelphia, PA 19104	□ (224) 999-3633 □ my.titipat@gmail.c thttps://github.com □ https://tupleblog.g titipata □ Google Scholar	titipata/	
Interests	Science of Science, Applied Machine Learning, Text Mining, Natural Language Processing, Content-based and Personalized Recommendation System, Medical Electronic Health Records			
EDUCATION	University of Pennsylvania, Philadelphia, PA, USA Ph.D., Bioengineering		2017 - Present (GPA 3.97/4.0)	
	Northwestern University, Evanston, IL, USA M.S./Ph.D., Biomedical Engineering		2013 - 2017 (GPA $3.95/4.0$)	
	Chulalongkorn University , Bangkok, Thailand B.Eng, Electrical Engineering, <i>First Class Honors</i>		2008 - 2012 (GPA $3.87/4.0$)	
Awards & Fellowships	Thailand Youth Start-Up Grant 2 nd place at Bangkok Datathon, <i>Analyzing Bangkok Budget</i> DARPA Systematizing Confidence in Open Research and Evidence funding Royal Thai Government Scholarship, Ministry of Science and Technology		2021 2021 $2020 - 2021$ $2012 - 2020$	
	2^{nd} place student case competition, Wharton People Analy Microsoft Azure Research Award \$20,000		$ \begin{array}{r} 2012 \\ 2018 \\ 2015 - 2016 \end{array} $	
	2^{nd} place in Data Visualization Competition, Northwestern Computational Research day 2015			
	Outstanding Academic Performance in Engineering	•	2008 - 2012	
	Nominated candidate for the Ananda Mahidol Scholarship		2012	
	SCG Innovative Suggestion Award		2011	
	1^{st} place in Mathematics Entrance Exam, ONET, Thailand	d	2008	
RESEARCH EXPERIENCE	Allen Institute for Artificial Intelligence Intership Mentor: Chandra Bhagavatula Research: Scientific Claim Indentification and Evidence Al	ignment	Spring 2017	
	Research Intern AIM Laboratory, Department of Biomedical Engineering Mahidol University, Salaya, Thailand		2012 – 2013	
	Undergraduate Research DSPRL Laboratory, Department of Electrical Engineering Chulalongkorn University, Bangkok, Thailand Advisor: Nisachon Tangsangiumvisai Research: Adaptive Filter and Noise Reduction Algorithm		2011 - 2012	

Talk

Department of Biomedical Engineering, Mahidol University, Salaya	March 2021
Natural Language and its application, Srinakharinwirot University, Bangkok	October 2020
Data Science in e-commerce, Knowledge Exchange, Bangkok	August 2020
Growth Lab, Harvard, University, Boston	April 2019
Python Data Science Meetup, Hangar, Bangkok	August 2017
Python Meetup Seattle (Puppy), Zillow, Seattle	June 2017
Brain and Behaviour lab, Imperial College London	September 2016
Data visualization judging panel, Northwestern Computational Research day	April 2016
HAMLET group, University of Wisconsin at Madison, Madison	March 2016
ChiPy (Chicago Python community), Bank of America, Chicago	February 2016
Knowledge Lab, University of Chicago, Chicago	November 2015

JOURNAL ARTICLES T Achakulvisut, T Ruangrong, P Mineault, TP Vogels, MAK Peters, P Poirazi, C Rozell, B Wyble, D Goodman, KP Kording (2020) Towards Democratizing and Automating Online Conferences: Lessons from the Neuromatch Conferences. Trends in Cognitive Sciences

> T van Viegen et al. (2020), Neuromatch Academy: Teaching Computational Neuroscience with global accessibility. arXiv preprint

> Achakulvisut T, Ruangrong T, Acuna DE, Wyble B, Goodman D, Kording K (2020) neuromatch: Algorithms to match scientists. eLife Labs

> T Achakulvisut, T Ruangrong, I Bilgin, S Van Den Bossche, B Wyble, D Goodman, K Kording (2020), Improving on legacy conferences by moving online. eLife, 2020

> T Achakulvisut, DE Acuna, K Kording (2020) Pubmed parser: a Python parser for PubMed Open-Access XML subset and MEDLINE XML dataset XML dataset. Journal of Open Source Software

> M Jas et al. (2020) Pyglmnet: Python implementation of elastic-net regularized generalized linear models. Journal of Open Source Software

> Achakulvisut T, Bhagavatula C, Acuna D, Kording K (2019) Claim extraction in biomedical publications using deep discourse model and transfer learning. arXiv preprint arXiv:1907.00962 (see on **5**)

> Kittinaradorn R, Achakulvisut T, Chaovavanich K, Srithaworn K, P Chormai, C Kaewkasi, T Ruangrong, K Oparad K (2019) Deep Cut: A Thai word tokenization library using Deep Neural Network. Github (see on **5**)

> Lienard JF, Achakulvisut T, Acuna DE, David SV (2018) Intellectual Synthesis in Mentorship Determines Success in Academic Careers. Nature communications

> Achakulvisut T, Acuna DE, Ruangrong T, Kording K (2016) Science Concierge: A Fast Content-Based Recommendation System for Scientific Publications. PLOS ONE 11(7): e0158423. doi:10.1371/journal.pone.0158423 (see on **5**)

Conferences

T. Achakulvisut, D. E. Acuna, K. P. Kording,

July 2017

Clustering conference abstracts using a combination of author preferences and topic relevance, Knowledge of Network Science Conference

D. E. Acuna, T. Achakulvisut, K. P. Kording

October 2015

How to visit 0.5% of 15,000 possible posters? Automated poster visit scheduler for SfN

Society for Neuroscience conference (see www.scholarfy.net)

D. E. Acuna, T. Achakulvisut, K. P. Kording

June 2015

Website for Automatic Reviewer Assignment and Manuscript Scoring Science of Team Science conference (see pr.scienceofscience.org)

Projects

Scholarfy - content-based recommendation for MEDLINE dataset

Recommendation system web application to search 28 million publications from MEDLINE dataset

Machine Learning facilitates Neuroscience Conferences

One-on-one matching algorithm for CCN conference, Paper-reviewer matching for COSYNE conference, Content-based recommnedation engine for SfN conference

Membership

Neuromatch Conference Organizer	2020 - present
NIH Special Volunteer	2016-present
Member of the McCormick Graduate Leadership Council, Northwestern U	2014 - 2015
IEEE Student Membership	2011 - 2015
Member of the Engineering Students Academic Club	2008 - 2011
Member of the Engineering Light and Sound Club	2008 - 2011

SELECTED EXTRACURRICULAR ACTIVITIES

AI Builders: Teaching AI to high school students in Thailand 2021 Summer School in Computational Sensory-Motor Neuroscience (CoSMo) 2014 Brain Fair, Northwestern University Brain Awareness Outreach 2014 NECTEC Electronics Camp: Teaching electronics to high school students 2010 Teaching basic science in remote areas of Thailand 2008 - 2010Head of Freshmen Tutorial Project: Teaching basic science for freshmen 2009 Physics Olympiad Camp 2006 - 2007

Computer Skills Programming and Scripting Languages:

Advanced: Python, Apache Spark, MATLAB, Mathematica

Intermediate: Julia, HTML, CSS, JavaScript, Java, R, C, AngularJS, Scala

Others: LATEX, Emacs, Git, Adobe Illustrator, Microsoft Office

Cloud Computing: Amazon EC2, Google Cloud Computing, Microsoft Azure

Operating Systems: Mac OS X, Linux, Windows

LANGUAGES

Thai (Native), English (Proficient)