## **Shamil Chollampatt**

CONTACT

**6** +65 94605116

INFORMATION

• http://shamilcm.github.io

• https://github.com/shamilcm

RESEARCH

Natural language processing and Artificial Intelligence

**INTERESTS** 

Topics: Grammatical error correction, machine translation and post-editing, educational NLP appli-

cations, low-resource and multilingual models.

**EDUCATION** 

National University of Singapore (NUS)

Singapore

Doctor of Philosophy (PhD), NGS

Aug 2014 – Sep 2018

Updated: November 6, 2019

Thesis: Translation Models for Grammatical Error Correction

Advisor: Prof. Ng Hwee Tou

GPA: 4.3/5

National Institute of Technology (NIT) Calicut

India

Jul 2009 - Apr 2013

Computer Science and Engineering GPA: 9/10 (Major GPA: 9.4/10)

Bachelor of Technology (B. Tech)

Work

Rakuten, Inc.

Singapore

EXPERIENCE Rakuten Institute of Technology

- Research Scientist

Sep 2019 – Present

Building and improving machine translation algorithms and models for Rakuten Translate project.

**National University of Singapore** 

Singapore

Department of Computer Science, School of Computing

- Research Fellow

Feb 2019 – Aug 2019

- Research Assistant

Aug 2018 – Feb 2019

- Graduate Assistant (Research)

Jan 2015 – May 2015

Conducted research on natural language processing, particularly in improving automatic grammatical error correction using machine translation techniques.

Oracle Bangalore, India

Business Intelligence, Server Technologies Group

- Member Technical Staff

Jun 2013 – Jun 2014

Worked on Real Time Decisions Manager software of the Oracle Business Intelligence suite using the Java framework, Oracle Application Development Framework (ADF).

**TEACHING** 

**National University of Singapore** 

Singapore

EXPERIENCE **Teaching Assistant**  Aug 2016 - Dec 2016

CS1020, CS1020E - Data Structures and Algorithms

Aug 2015 - Dec 2015

Module Coordinator: Prof. Tan Sun Teck

Aug 2014 - Dec 2014

**PUBLICATIONS** 

• Shamil Chollampatt, Weiqi Wang, and Hwee Tou Ng. Cross-Sentence Grammatical Error Correction. In Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics, Florence, Italy.

- Shamil Chollampatt and Hwee Tou Ng. 2018. Neural quality estimation of grammatical error correction. In *Proceedings of the 2018 Conference on Empirical Methods in Natural Language Processing (EMNLP 2018)*, Brussels, Belgium.
- Shamil Chollampatt and Hwee Tou Ng. 2018. A reassessment of reference-based grammatical error correction metrics. In *Proceedings of the 27th International Conference on Computational Linguistics (COLING 2018)*, Santa Fe, New Mexico, USA.
- **Shamil Chollampatt** and Hwee Tou Ng. 2018. A multilayer convolutional encoder-decoder neural network for grammatical error correction. In *Proceedings of the 32nd AAAI Conference on Artificial Intelligence (AAAI 2018)*, New Orleans, Louisiana, USA.
- Shamil Chollampatt and Hwee Tou Ng. 2017. Connecting the dots: Towards human-level grammatical error correction. In *Proceedings of the 12th Workshop on Innovative Use of NLP for Building Educational Applications (BEA 2017)*, Copenhagen, Denmark.
- Shamil Chollampatt, Duc Tam Hoang, Hwee Tou Ng. 2016. Adapting grammatical error correction based on the native language of writers with neural network joint models. In *Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing (EMNLP 2016)*, Austin, Texas, USA.
- Shamil Chollampatt, Kaveh Taghipour, Hwee Tou Ng. 2016. Neural network translation models for grammatical error correction. In *Proceedings of the 25th International Joint Conference on Artificial Intelligence (IJCAI 2016)*, New York, USA.
- Duc Tam Hoang, **Shamil Chollampatt**, Hwee Tou Ng. 2016. Exploiting n-best hypotheses to improve an SMT approach to grammatical error correction. In *Proceedings of the 25th International Joint Conference on Artificial Intelligence (IJCAI 2016)*, New York, USA.

OTHER ACADEMIC PROJECTS

#### **Automated Essay Scoring using Discourse Features**

Aug 2015 – Dec 2015

- Supervisor: Diane J. Litman, University of Pittsburgh, USA
- Incorporated discourse-level features from a discourse parser and coherence model features to improve automated essay scoring.
- Won the best project award in the NUS School of Computing project showcase, STePS 2015.

#### **Chatbot for Grammar Tutoring**

Aug 2014 - Dec 2014

- Supervisor: Arne Jönsson, Linköping University, Sweden
- Built a dialogue system with a grammar checker backend that will provide feedback to users regarding their language use through interactive dialogues.

#### **Recommender for Music Tracks**

Dec 2011

2016

- Supervisors: Bhiksha Raj and Rita Singh, Carnegie Mellon University, Pittsburgh, USA
- Implemented a personalized song recommendation system. The audio signals of tracks were modeled using Gaussian mixture models (GMM) and an SVM classifiers were used for recommendation learned via active learning through user feedback.

#### **Experimental Operating System**

http://xosnitc.github.com

Jan 2012 – Feb 2013

- Supervisor: Murali Krishnan, National Institute of Technology Calicut, India
- Designed, implemented, and documented an instructional toy operating system. It was deployed as part of undergraduate coursework at National Institute of Technology (NIT) Calicut and Indian Institute of Technology (IIT) Palakkad.

MENTORING

- Anja Reusch, Technische Universität Dresden (Internship Project)
   Wang Weiqi, National University of Singapore (Graduate Student Research Project)
   2018
- Cristina Panait, University Politehnica of Bucharest (Internship Project)

# AWARDS AND ACHIEVEMENTS

- Dean's Graduate Research Excellence Award, School of Computing, NUS, 2018.
   Awarded to PhD candidates who "made significant research achievements during their PhD study" and "produced strong evidence of sustained research achievement".
- Research Achievement Award, School of Computing, NUS, 2016.
   Awarded to PhD students "who have achieved outstanding research performance" in a year.
- NUS Graduate School (NGS) Scholarship, 2014–2018.
   NGS scholarship is a prestigious scholarship "awarded to talented students with an aptitude for innovative, high calibre PhD research".
- All-India Rank 29 (out of 155,190 candidates, i.e., 99.98<sup>th</sup> percentile) in the Graduate Aptitude Test for Engineering (GATE) 2014 for Computer Science and Engineering in India.

#### TALKS Adapting Machine Translation Models for Grammatical Error Correction

Seminar, Singapore University of Technology and Design.

Correcting Language Errors using Machine Translation Techniques
Research Talk, NUS School of Computing, NUS

Correcting Language Errors using Machine Translation Techniques
9th Global Wordnet Conference (GWC 2018), Singapore

Jan 2018

#### SERVICE Confe

### **Conferences and Workshops**

- Program Committee Member, AAAI 2020
- Program Committee Member, EMNLP 2019
- Program Committee Member, BEA Workshop, 2019
- Program Committee Member, ACL 2019
- Program Committee Member, ACL Student Research Workshop 2019
- Program Committee Member, NAACL 2019
- Program Committee Member, AAAI 2019
- Program Committee Member, BEA Workshop, 2018
- Reviewer, ACL 2018
- Program Committee Member, NAACL 2018
- Program Committee Member, AAAI 2018
- Program Committee Member, ACL 2017
- Program Committee Member, IJCNLP 2017
- Program Committee Member, BEA Workshop, 2017

#### **Journals**

- Reviewer, Computational Linguistics Journal
- Reviewer, Journal of Natural Language Engineering

## AFFILIATIONS / RESPONSIBILITIES

- Member, SIGEDU (Special Interest Group on Building Educational Applications), 2018-2019
- RESPONSIBILITIES Member, Association of Artificial Intelligence (AAAI), 2018.
  - Member, Association of Computational Linguistics (ACL), 2016-2019.
  - Vice Chair, ACM Student Chapter, NIT Calicut, 2013.
  - Organizer, FOSSMeet (Free and Open Source Software Meet) 2010-2013 at NIT Calicut.