KHOA NGUYEN

2055 Carling Ave, Ottawa, Ontario, Canada . 613 406 8249 . khoantd2010@gmail.com

SUMMARY OF QUALIFICATIONS

- Experience in the Telecom industry.

- Background in programming languages: C/C++, MATLAB, Java, Python.

- Experience with integration, problem-solving, and creative thinking.

- Research interests: communication networks, cloud and edge computing, future Internet architecture, network virtualization, software-defined networks, network function virtualization.

PROFESSIONAL EXPERIENCE

Instructor   *Sept, 2013 - Sept, 2015*
Can Tho University of Technology, Can Tho City, Viet Nam

- Developing and executing program objectives for the Electrical and Electronics Engineering Program.

- Building course syllabus and curriculum for Electronic and Electrical Materials subject.

- Counseling students on academic and professional probation.

Telecommunication Engineer   *Mar, 2009 - Nov, 2010*
Viettel Telecom Company, Can Tho City, Viet Nam.

- Monitoring, resolving and response to technological issues in Network Operation Center.

- Installing, configuring, and maintaining network infrastructure in a large-scale network.

- Collaboration with other departments to initialize, follow and move projects forward as well as fixing up unexpected technical issues in networks.

- Daily report documentation of work, progress, plans and remaining issues.

- Sharing knowledge through technical seminars with teams and other departments.

- Providing technical support for other departments in case of incidents.

Network Engineer (Work package)   *Jun, 2008 - Mar, 2009*
Vietnam mobile services company (VMS-Mobifone) - Zone 3, Can Tho City, Vietnam.

- Monitoring, resolving and response to technological issues in Operation and Maintenance Center (O&M).

- Collaboration with Telecommunication Network companies to initialize, follow up and move projects forward.

- Daily documentation of work and remaining issues.

- Maintaining numerous Base Transceiver Stations and Base Station Controllers in 2G network.

- Testing new mobile services.

EDUCATION

Ph.D. in Electrical and Computer Engineering *2015-2021*

Department of Systems and Computer Engineering, Carleton University, Canada

M.Sc. in Telecommunications Engineering *2012 - 2013*

Faculty of Computer Science, University of Sunderland, UK

B.Eng. Degree in Electronics and Telecommunication *2003 - 2008*

College of Engineering Technology, Can Tho University, Vietnam

TEACHING ASSISTANCE – CARLETON UNIVERSITY

- SYSC5801F/W - Advanced Topic in Computer Communications (Fall 2016, Winter 2016)
- SYSC5001W – Discrete Simulation/Modelling (LEC) (Winter 2019)
- SYSC2310A – Introduction to Digital Systems (Fall 2017)
- SYSC2004 – Object-Oriented Software Development (LEC) (Fall 2018, Winter 2018, Winter 2019)
- ECOR1606 – Problem Solving and Computers (Winter 2017, Summer 2017)

PROFESSIONAL ACTIVITIES - REVIEWER

- IEEE Internet of Things Journal
- IEEE Access
- Journal of Networking and Network Applications
- IEEE Global Communications Conference
- IEEE Vehicular Technology Conference

SCHOLARSHIPS & AWARDS

- Student Travel Grant to IEEE International Conference on Communications (ICC 2021)   2021
- Mekong 1000 Project Scholarship   2010
- VIED Scholarship   *2014*

LIST OF PUBLICATIONS

Journals:

1. K. Nguyen and C. Huang, "Towards Adaptive Joint Node and Link Mapping Algorithms for Embedding Virtual Networks: A Conciliation Strategy", IEEE Transaction on Network and Service Management, 2021 (*submitted*).

2. K. Nguyen, S. Drew, C. Huang and J. Zhou, "Parked Vehicles Task Offloading in Edge Computing", IEEE Access, 2021 (*submitted*).

3. Q. Lu, K. Nguyen and C. Huang, "GAONE: A Novel Approach for Online One-stage Virtual Functions Embedding", Journal of Networking and Network Applications, 2021 (*to appear*).

4. K. Nguyen and C. Huang, "Distributed parallel genetic algorithm for online virtual network embedding," Wiley International Journal of Communication Systems, 23 Dec 2020, pp. e4691, doi: 10.1002/dac.4691.

5. Q. Lu, K. Nguyen and C. Huang, Distributed parallel algorithms for online virtual network embedding applications. Wiley International Journal of Communication Systems, 24 Jan 2020, pp. e4325, doi: 10.1002/dac.4325.

Conferences:

1. K. Nguyen, Q. Lu and C. Huang, "Joint Node-Link Algorithm for Embedding Virtual Networks with Conciliation Strategy," 2021 IEEE Global Communications Conference (Globecom), Madrid, Spain, 2021 (*accepted for publication*).

2. K. Nguyen, Q. Lu and C. Huang, "Joint Node-Link Embedding Algorithm based on Genetic Algorithm in Virtualization Environment," 2021 IEEE 94th Vehicular Technology Conference (VTC2021-Fall), 2021, (*accepted for publication*).

3. K. Nguyen, S. Drew, C. Huang and J. Zhou, "EdgePV: Collaborative Edge Computing Framework for Task Offloading," ICC 2021 - IEEE International Conference on Communications, 2021, pp. 1-6, doi: 10.1109/ICC42927.2021.9500400.

4. K. Nguyen, S. Drew, C. Huang and J. Zhou, "Collaborative Container-based Parked Vehicle Edge Computing Framework for Online Task Offloading," 2020 IEEE 9th International Conference on Cloud Networking (CloudNet), 2020, pp. 1-6, doi: 10.1109/CloudNet51028.2020.9335809.

5. K. Nguyen, Q. Lu and C. Huang, "Efficient Virtual Network Embedding with Node Ranking and Intelligent Link Mapping," 2020 IEEE 9th International Conference on Cloud Networking (CloudNet), 2020, pp. 1-5, doi: 10.1109/CloudNet51028.2020.9335801.

6. K. T. Nguyen, Q. Lu and C. Huang, "Rethinking Virtual Link Mapping in Network Virtualization," 2020 IEEE 92nd Vehicular Technology Conference (VTC2020-Fall), 2020, pp. 1-5, doi: 10.1109/VTC2020-Fall49728.2020.9348799.

7. Q. Lu, K. Nguyen and C. Huang, "A Novel One-stage Distributed Parallel Embedding for Virtualized Network Environment," in 2020 IEEE International Conference on Systems, Man, and Cybernetics (SMC), Toronto, ON, Oct. 2020, pp. 395-400, doi: 10.1109/SMC42975.2020.9282829.

8. K. Nguyen and C. Huang, "An Intelligent Parallel Algorithm for Online Virtual Network Embedding," in 2019 International Conference on Computer, Information and Telecommunication Systems (CITS), Beijing, China, Aug. 2019, pp. 1-5, doi: 10.1109/CITS.2019.8862072.