# Pham Dinh Nguyen

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### Education

University of Houston

Sep 2014 - Dec 2019 (Expected)

PhD in Computer Science, GPA: 4.0/4.0 University of The Philippines Diliman

Oct 2010 - Oct 2013

MS in Computer Science, GPA: 3.7/4.0 HCM City University of Technology

Sep 1999 - Sep 2004

Engineer Diploma in Electrical and Information Technology

# **Higher Education Experience**

#### University of Houston

Sep 2014 - Present

Teaching Assistant

- Courses: Computer Organization. Algorithms and Data Structure, Artificial Intelligence, Machine Learning.
- Prepared and instructed students on two course projects (prune search, reinforcement learning).

Research Assistant

- DHS SenseNet sub project on aerosol detection: supervised by Dr. Eick, investigated Gaussian Mixture model for biochemical threat detection from low-cost sensors measurements.
- NSF BigData Grant on distributed algorithms for large-scale graph problems: supervised by Dr. Pandurangan, investigated network cascading influence model.

### Skills and Interests

**Programming**: Scala, Java, C++, C, Python, PHP, JavaScript. Past experience: Web development with Java EE 6, Yii, Zend. Tools (course/research): hadoop, spark.

Interests: concurrency and distributed computing (personal projects https://github.com/ngpham), distributed algorithms, asynchronous protocols, data mining (graph influence), approximation algorithms. Others: functional programming, parsing, Haskell, Coq.

## **Industrial Experience**

Splice Machine Software Engineer Intern

May 2019 - Aug 2019

- Worked on Database development team (ACID SQL over Hadoop).
- Implemented SQL features, fixed blocking issues on external tables operation.
- Improved external tables operation using TPC benchmarks.

Lazada PHP Tech Lead

Feb 2014 - Aug 2014

- Developed Lazada e-commerce websites for SEA countries.
- Tech Lead on Search/Filter.
- Technologies: Yii, Zend, jQuery, ExtJS, MySQL, Solr, Memcached, Redis, RabbitMQ.

### TMA Solutions Consultant

Jan 2005 - Oct 2010

- Onsite Engineer at Avaya (Nortel) R & D Facility in Galway, Ireland. Telecom systems and software integration, performance tests.
- Supervise training for offshore team of over forty members.

#### **Publications**

Maleq Khan, Gopal Pandurangan, Nguyen Dinh Pham, Anil Vullikanti, Qin Zhang. *Improved Probabilistic Guarantees for Influence Maximization*. To appear in SIAM Symposium on Algorithm Engineering and Experiments (ALENEX20).

Soumyottam Chatterjee, Gopal Pandurangan, Nguyen Dinh Pham. Distributed MST: A Smoothed Analysis. To appear in International Conference on Distributed Computing and Networking (ICDCN 2020).

Soumyottam Chatterjee, Reza Fathi, Gopal Pandurangan, Nguyen Dinh Pham. Fast and Efficient Distributed Computation of Hamiltonian Cycles in Random Graphs. 38th IEEE International Conference on Distributed Computing Systems, ICDCS 2018, Vienna, Austria, July 2-6, 2018.