

**Pham Dinh Nguyen**  
aphamdn@gmail.com • <https://ngpham.github.io>

---

## Education

---

<b>University of Houston</b> <i>PhD in Computer Science, GPA: 4.0/4.0</i>	<i>Sep 2014 – Dec 2019 (Expected)</i>
<b>University of The Philippines Diliman</b> <i>MS in Computer Science, GPA: 3.7/4.0</i>	<i>Oct 2010 – Oct 2013</i>
<b>HCM City University of Technology</b> <i>Engineer Diploma in Electrical and Information Technology</i>	<i>Sep 1999 – Sep 2004</i>

---

## Higher Education Experience

---

<b>University of Houston</b> <i>Teaching Assistant</i>	<i>Sep 2014 – Present</i>
<ul style="list-style-type: none"><li>• Courses: Computer Organization. Algorithms and Data Structure, Artificial Intelligence, Machine Learning.</li><li>• Prepared and instructed students on two course projects (prune search, reinforcement learning).</li></ul>	
<i>Research Assistant</i>	
<ul style="list-style-type: none"><li>• DHS SenseNet sub project on aerosol detection: supervised by Dr. Eick, investigated Gaussian Mixture model for biochemical threat detection from low-cost sensors measurements.</li><li>• NSF BigData Grant on distributed algorithms for large-scale graph problems: supervised by Dr. Pandurangan, investigated network cascading influence model.</li></ul>	

---

## 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

---

<b>Splice Machine</b> <i>Software Engineer Intern</i>	<i>May 2019 – Aug 2019</i>
<ul style="list-style-type: none"><li>• Worked on Database development team (ACID SQL over Hadoop).</li><li>• Implemented SQL features, fixed blocking issues on external tables operation.</li><li>• Improved external tables operation using TPC benchmarks.</li></ul>	
<b>Lazada</b> <i>PHP Tech Lead</i>	<i>Feb 2014 – Aug 2014</i>
<ul style="list-style-type: none"><li>• Developed Lazada e-commerce websites for SEA countries.</li><li>• Tech Lead on Search/Filter.</li><li>• Technologies: Yii, Zend, jQuery, ExtJS, MySQL, Solr, Mem-cache, Redis, RabbitMQ.</li></ul>	
<b>TMA Solutions</b> <i>Consultant</i>	<i>Jan 2005 – Oct 2010</i>
<ul style="list-style-type: none"><li>• Onsite Engineer at Avaya (Nortel) R &amp; D Facility in Galway, Ireland.</li><li>• Supervise training for offshore team of over forty members.</li></ul>	

---

## 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.