#### **Nithin Michael**

2250 North Triphammer Road, Apt D8 Ithaca, NY 14850 nm373@cornell.edu

### **Education**

Cornell University, Ithaca, NY

MS\Ph.D. in Electrical Engineering, August 2008 – August 2013

**Cumulative GPA: 4.12/4.00** 

Drexel University, Philadelphia, PA

Bachelor of Science in Electrical Engineering (summa cum laude) June, 2008

Cumulative GPA: 4.00/4.00, Dean's List (2003 – 2008)

#### **Honors and Awards**

• Jacobs Fellowship (Cornell University), 2008, 2010

- 1st Honors (ECE, Drexel University) 2008
- Highest Academic Achievement Award (Drexel University), 2008
- Senior Design Competition (ECE, Drexel University) First Place, 2008
- William L. Everitt Student Award of Excellence (International Engineering Consortium), 2008
- HKN Outstanding ECE Student Award Program, Honorable Mention, AY 2007-2008
- TBP Record Scholarship, 2007
- Harry Muchnic Scholarship 2006, 2007
- Dean's Scholarship (\$90,000 five year award, Drexel University), 2003
- Honors Societies: HKN, TBP

# Work, Research and Teaching Experience

### Waltz Networks, Inc., Ithaca, NY

President, October 2013 - present, CEO, June 2015 - present

- Handle product design and architecture, PI on \$150,000 NSF Phase I SBIR grant
- Handle daily operations and management, investor relations and recruitment
- Lead customer acquisition and interaction

### Cornell University, Ithaca, NY

PhD Student (Adviser: Dr. Kevin Tang), August 2008 to August 2013, Postdoctoral Scholar, August 2013 – July 2015

- First to develop an optimal distributed link-state hop-by-hop routing algorithm
- First to develop an algorithm that achieved logarithmic regret in the multi-armed bandit problem with competition
- Co-instructor for Control and Optimization of Information Networks, TA for Computer Networks and Telecommunications

### Viking Global Investors, Greenwich, CT

Summer Intern, June 2011 to August 2011

- Restructured firm P&L calculation and reporting
- Built a stock loan billing reconciliation system to track Viking's short positions worth \$8 billion
- · Developed tools to flag suspicious trades and to identify when soft dollar commission thresholds were crossed

### Data Fusion Laboratory, Drexel University, Philadelphia, PA

Research Assistant, Teaching Assistant (Adviser: Dr. Moshe Kam), June 2005 to June 2008

- Found methods to improve data fusion algorithms in distributed detection networks
- · Worked on developing echo cancellation algorithms for through the bulkhead communications for the Navy
- Taught sophomore recitation sections for Systems of Differential Equations

# Siemens Medical Solutions, Malvern, PA

Software Developer, September 2004 to March 2005 & September 2005 to March 2006

- Developed an automated process for EJB web service generation for the Soarian Target Architecture
- Worked on the internationalization of the Soarian Scheduling application
- Updated and restructured application related databases

### **Patents & Publications**

# "HALO: Hop-by-hop Adaptive Link-state Optimal Routing"

by N. Michael and A.K. Tang

accepted to IEEE Transactions on Networking, July 2014

# "Optimal Link-state Hop-by-hop Routing"

by N. Michael, A.K. Tang and D. Xu

Proc. of ICNP 2013 (Goettingen, Germany), October 2013

## "Quadrisection Based Task Mapping on Many-Core Processors for Energy-Efficient On-Chip Communication"

by N. Michael, Y. Wang, G. E. Suh and A.K. Tang

Proc. of ACM/IEEE NOCS, (Tempe, USA), April 2013

# "On the Performance of Averaged Optimal Routing"

by N. Michael, A.K. Tang and E. Suh

Proc. of CISS, (Princeton, USA), March 2012

# "Analysis of Application-Aware On-Chip Routing Under Traffic Uncertainty"

by N. Michael, M. Nikolov, A.K. Tang, E. Suh and C. Batten

Proc. of ACM/IEEE NOCS, (Pittsburgh, USA), May 2011

### "Distributed Learning and Allocation of Cognitive Users with Logarithmic Regret"

by A. Anandkumar, N. Michael, A.K. Tang, and A. Swami.

IEEE Journal on Selected Areas in Communications, 29(4):731-745, April 2011.

### "Opportunistic Spectrum Access with Multiple Users: Learning under Competition"

by A. Anandkumar, N. Michael, and A.K. Tang.

in Proc. of IEEE INFOCOM, (San Diego, USA), Mar. 2010.

System and Method for Improved Network Routing - N. Michael & A. Tang (Provisional Patent), 2012

# Relevant Coursework, Computer Skills and Languages

Combinatorial Optimization, Mathematical Programming, Detection and Estimation, Information Theory, Fundamentals of Networks, Real Analysis, Control and Optimization of Information Networks, Chip-Level Interconnection Networks, Advanced Topics in Network Information Flow, Non-Linear Dynamics and Chaos

Computer Skills - C/C++, Java, SQL, Microsoft .NET Framework, JavaScript, Perl, Ruby, Python, Matlab, ASP, XML, VB Languages – Malayalam (Native), Hindi (Fluent), English (Fluent), French (Fluent)

## **Extracurricular Activities and Accomplishments**

# **Engineering Graduate Students Association, Cornell University**

President, 2011 – 2012 & Treasurer 2010 – 2011

#### **IEEE Philadelphia Section Executive Committee**

Student Representative – 2008

# **IEEE Student Branch, Drexel University**

Vice President - 2006, 2007, 2008

### HKN Beta Alpha Chapter, Drexel University

*President* – **2007, 2008** 

### Undergraduate Student Government Association (USGA), Drexel University

Senator, 2005

### Other Activities

Chess (National Chess Congress 2003, Philadelphia – First Place (Unrated)), Break dancing, Fencing, Salsa, Wines, Stock and Options Trading, Bridge to **BCG**