

## CV of Jiajia Chen

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**Personal Data:** **Name** Jiajia Chen **Gender** Female  
**Date of Birth** Sept. 25, 1981 **Number of kids** 2 sons

### **Education:**

- Ph.D. in Microelectronics and Applied Physics (2006–2009), KTH Royal Institute of Technology, Sweden
- Bachelor (Top 3%) in Information Engineering (2000 –2004), Zhejiang University, China.

### **Present and previous positions**

- Associate Professor (UNIVERSITETSLEKTOR) in Optical Networking (2015 – present), KTH, Sweden  
-Since 2015 programme director in Information and Communication Technology (TCOMK)  
-Since June 2013 heading a research group on datacentre networks at Sino-Swedish Joint Research Centre of Photonics (JORCEP)
- Assistant Professor (UNIVERSITETSLEKTOR, BITR) in Optical Networking (2012 – 2014), KTH, Sweden
- Postdoctoral Researcher (2009 – 2012), KTH, Sweden.

### **Supervision of Graduate Students**

- 2010-, 5 PhD students at KTH: M. Mahloo (licentiate in 2013), P. Wiatr, K. Wang, F. Yaghoubi and R. Lin
- 2013-, 3 PhD students at JORCEP: Y. Gong, Y. Hong and X. Shen
- 8 master students already got their degrees at KTH: M. Jose Peroza (2010), P. Uthairat (2010), M. Cen (2011), A. Getaneh (2012), S. Khanmohamadi (2012), F. Abtahi (2013), S. Poudel (2013) and S. Sadat Banijamali (2013)
- 5 master students currently under supervision at KTH: M. Farahnaki, F. Zelalem, H. Chen, Y. Cheng and C.Rojas

### **Leadership in current and recent national and international research projects**

- Principle investigator: Swedish Foundation for Strategic Research SSF-project: Enabling Scalable and Sustainable Data Center Networks (6 Million SEK, 2014 - 2019)
- Co-principle investigator: Swedish Research Council VR framework project: Towards Flexible and Energy-Efficient Datacentre Networks (9 Million SEK, 2014-2018)
- Task leader: EIT-ICT project: Mobile Backhaul (160 000 Euro, 2013 – 2014)
- Task leader: EU FP7 large scale integrated project: The DIStributed Core for unlimited bandwidth supply for all Users and Services (DISCUS) (609 439 Euro, 2012 - 2015)
- Technical coordinator at KTH: EU FP7 large scale integrated project, Optical Access Seamless Evolution (OASE) (578 014 Euro, 2010 - 2013)
- Starting packet at KTH: 1.5 Million SEK, 2014-2016

### **Organization of scientific conferences**

- Chair of Focus Sessions at PIERS 2014, 2015
- Chair of the Local Organizing Committee of IEEE ONDM 2014
- Member of the Local Organizing Committee of PIERS 2013
- Chair of workshop at IEEE/OSA/SPIE ACP 2013 and 2014
- Co-Chair of workshops at IEEE/OSA/SPIE ACP 2010, 2011 and 2012
- Co-Chair of the Local Organizing Committee of IEEE ICTON, 2011
- Co-Chair of workshop at IEEE ICTON 2011

### **TPC Co-Chair:**

- Swedish National Computer Networking Workshop (SNCNW), 2014
- Track on Optical Networking and Switching Technologies Symposium of OECC2015 (The 20th OptoElectronics and Communications Conference)

**TPC Members:** IEEE ICOCN 2014; IEEE GLOBECOM, Workshop on SDN-Optics 2013; IEEE/OSA/SPIE ACP 2013-2014; IEEE ONDM 2013-2014; ACM/IEEE/IFAC/TRB ICCVE 2012; IEEE ICC, Symposium on Optical Networks and Systems 2012-2015; International workshop on FOAN 2010-2012; IEEE HPSR 2011; IEEE ICNC, Symposium on Optical and Grid Networking 2013.

**Evaluator of project proposals:** Appointed by Technology Foundation STW, 2010; NSERC Natural Sciences and Engineering Research Council of Canada, 2014; NCN National Science Center Poland, 2014.

### **Awards**

- Best Student Paper Award at SPIE Asia-Pacific Optical Communications Conference APOC, 2007 and 2008
- According to KTH RAE2012 Research Assessment Exercise, as an individual researcher the applicant was ranked as the highest in the unit of assessment (Referee: Prof. Jens Zander, Dean at the School of Information and Communication Technology, KTH, email: [jenz@kth.se](mailto:jenz@kth.se))

## Main Publication List

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- *Senior Member, IEEE*, since 2014
- ***39 journal papers, 63 conference papers, 1 book, 6 book chapters, and 9 patent applications.***
  - The complete publication list can be found at homepage <http://web.it.kth.se/~jjajiac/>
- Google scholar statistics (Latest updated: 2015-01-22)
  - **Sum of the times cited: 758**
  - **h-index: 14**

### 10 selected publications (\*corresponding author)

- [1] M. Cen, **J. Chen\***, V. Moeyaert, P. Mégret and M. Wuilpart, “Multi-wavelength transmission-reflection analysis for fiber monitoring”, OSA OPT. EXPRESS, Nov. 2014.
- [2] Y. Yang, K. W. Sung, L. Wosinska and **J. Chen\***, “Hybrid Fiber and Microwave Protection for Mobile Backhauling”, IEEE/OSA Journal of Optical Communications and Networking, vol. 6, pp. 869-878, Oct. 2014.
- [3] M. Fiorani, S. Aleksic, M. Casoni, L. Wosinska and **J. Chen\***, “Energy-Efficient Elastic Optical Interconnect Architecture for Data Centers”, IEEE Communications Letters, vol. 18, pp. 1531-1534, Sept. 2014.
- [4] **J. Chen**, C. Mas Machuca, L. Wosinska, and M. Jaeger, “Cost vs. Reliability Performance Study of Fiber Access Network Architectures”, IEEE Communications Magazine, vol. 48, pp.56-65, Feb. 2010. (number of citations: 71)
- [5] **J. Chen**, and L. Wosinska, “Analysis of Protection Schemes in PON Compatible with Smooth Migration from TDM-PON to Hybrid WDM/TDM PON”, OSA Journal of Optical Networking, vol. 6, pp. 514-526, May, 2007. (number of citations: 52)
- [6] **J. Chen**, B. Chen and L. Wosinska, “Joint Bandwidth Scheduling to Support Differentiated Services and Multiple Service Providers in 1G and 10G EPONs”, IEEE/OSA Journal of Optical Communications and Networking, vol. 1, pp.343-351, Sep. 2009. (number of citations: 23)
- [7] **J. Chen**, L. Wosinska, and S. He, “High Utilization of Wavelengths and Simple Interconnection between Users in a Protection Scheme for Passive Optical Networks”, IEEE Photonics Technology Letters, vol. 20, pp. 389-391, Mar. 2008. (number of citations: 22)
- [8] **J. Chen**, L. Wosinska, M. Niaz Chughtai, and M. Forzati, “Scalable Passive Optical Network Architecture for Reliable Service Delivery”, IEEE/OSA Journal of Optical Communications and Networking, vol. 3, pp. 667-673, Sep. 2011. (number of citations: 17)
- [9] B. Skubic, **J. Chen**, J. Ahmed, L. Wosinska and B. Mukherjee, "A Comparison of Dynamic Bandwidth Allocation for EPON, GPON and Next Generation TDM PON", IEEE Communications Magazine, vol. 47, pp. S40-S48, Mar. 2009. (number of citations: 97)
- [10] N. Skorin-Kapov, **J. Chen**, and L. Wosinska, “A New Approach to Optical Networks Security: Attack Aware Routing and Wavelength Assignment“, IEEE/ACM Transactions on Networking, vol. 18, pp. 750-760, Jun. 2010. (number of citations: 44)

### Invited talks and tutorials

- “Cost-efficient fault supervision schemes for next generation optical access networks”, IEEE/OSA/SPIE ACP, Nov. 2014
- “High-capacity and energy-efficient optical interconnect for datacentre networks”, IEEE ICTON, July 2014
- “Optical interconnects for datacentre networks: progress and challenges”, PIERS, Aug. 2014
- “Efficient resiliency mechanisms for next generation passive optical networks”, IEEE ICICS, Dec. 2013.
- “Reducing the impact of failures in next generation optical access networks”, IEEE/OSA/SPIE ACP, Nov. 2012.
- “Passive wide area network solutions: filterless and semi-filterless optical networks,” IEEE ICTON, June 2011.
- “Advances in fiber access networks development: efficient resource allocation and cost effective protection,” SPIE Photonics West, Jan. 2011.
- “Next generation fiber access networks” tutorials at Technische Universität München (TUM), Germany, Jun. 2010 and May 2011; at Zhejiang University, China, Nov. 2013; at Soochow University, China, Jan. 2014; at Linköping University, Sweden, Feb. 2014.
- “Next Generation Optical Networks: Design, Analysis and Simulation”, tutorial at doctoral school of the "Photonics@be" in Belgium, May 2014
- “Optical Networks for Data Centers”, tutorial at City University of Hong Kong, Aug. 2014.