Curriculum Vitae

Hanjie Chen（陈涵洁）

Personal Information

Gender: Female Date of Birth: Sept. 1994

Phone: +1 (434) 2279960 Email: hc9mx@virginia.edu

Department of Computer Science (CS), University of Virginia (UVa)

Education

- **University of Virginia** *Aug. 2018 – Present*
  - Ph.D. in Computer Science
- **University of Science and Technology of China (USTC)** *Sept. 2015 – Jun. 2018*
  - Master of Engineering in Information and Communication Engineering
  - Cumulative Grade Point Average: 3.97/4.3 (92.67/100); Integrated Ranking: 2/81
- **Nanjing University of Aeronautics and Astronautics (NUAA)** *Sept. 2011 – Jun. 2015*
  - Bachelor of Engineering in Information Engineering
  - Cumulative Grade Point Average: 4.2/5.0 (92/100); Integrated Ranking: 1/145

Research Experience

- **RA in Natural Language Processing Group, UVa** *2018 – Present*
  Advisor: Prof. Yangfeng Ji
  - Natural language processing
  - Deep learning
- **RA in Optical Wireless Communication & Network Center, USTC** *2015 – 2018*
  Advisor: Prof. Zhengyuan Xu

  Theories:
  - Wireless communication and signal processing (modulation, equalization, signal detection)
  - Resource allocation and optimization (bit and power loading, constellation and filter design)
  - Radiation pattern modeling, optical wireless communication channel analysis and simulation

  Experiments:
  - Device and system characteristics, FPGA/ SCM based on-board systems
  - Achieved an organic light emitting diode (OLED) based visible light communication system with the highest transmission rate within the reported literatures.
- **RA in Key Laboratory of Radar Imaging and Microwave Photonics, NUAA** *2013 – 2014*
  Advisor: Prof. Shilong Pan
  - Photon-assisted broadband millimeter-wave array system (National college students' science and technology innovation project)
  - Main responsibility: Project leader
- **TA for *Matrix Theory* in EEIS, USTC** *Mar. 2017 – Jul. 2017*

Research Interests

- Natural Language Processing, Data Mining
- Machine/Deep Learning
- Modeling and Optimization

Curriculum Vitae

Research Techniques and Skills

- Python, MATLAB, LATEX, etc.
- C, C++ (National Computer Rank Examination, Certificate of Level 3)

Awards

- Excellent Graduates in Anhui Province, China (**top 4%**, 2018)
- Outstanding Graduates Awards, USTC (2018)
- National Scholarship for Graduate Students, USTC (**top 3%**, 2017)
- Outstanding Student Scholarship, First Prize, USTC (2015, 2016, 2017)
- National College Students' Mathematical Modeling Competition, Third Prize (2016)
- Outstanding Graduates Awards, NUAA (2015)
- CATIC Special Scholarship, NUAA (**9 students were honored** within the whole school, 2014)
- National Undergraduate Electronic Design Contest, Second Prize in Jiangsu Province (2014)
- National Scholarship, NUAA (**top 1%**, 2013)
- College Physics and Experimental Technology Contest, Third Prize in Jiangsu Province (2013)
- First Prize of Excellent Student Scholarship, Merit Student Awards, NUAA (2012, 2013, 2014)

Publications

- [J1] **H. Chen** and Z. Xu, "A two-dimensional constellation design method for visible light communications with signal-dependent shot noise," *IEEE Communications Letters*, vol. 22, no. 9, pp. 1786-1789, Sept. 2018.
- [J2] **H. Chen**, Z. Xu, Q. Gao, and S. Li, "A 51.6 Mbps experimental VLC system using a monochromic organic LED," *IEEE Photonics Journal*, vol. 10, no. 2, Article Sequence Number 7901312, April 2018.
- [J3] **H. Chen** and Z. Xu, "OLED panel radiation pattern and its impact on VLC channel characteristics," *IEEE Photonics Journal*, vol. 10, no. 2, Article Sequence Number 7901410, April 2018.
- [J4] W. Li, S. Li, L. Duan, **H. Chen**, L. Wang, G. Dong, and Z. Xu, "Squarylium and rubrene based filterless narrowband photodetectors for an all-organic two-channel visible light communication system," *Organic Electronics*, vol. 37, pp. 346-351, Oct. 2016.
- [C1] **H. Chen** and Z. Xu, "Radiation pattern modeling of a bent OLED panel for visible light communication," *Asia Communications and Photonics Conference (ACP)*, Guangzhou, China, November 10 – 13, 2017.
- [C2] **H. Chen**, S. Li, W. Li, B. Huang, J. Xie, G. Dong, and Z. Xu, "A 1.9 Mbps OFDM-based all-organic visible light communication system," *The 15th IEEE International Conference on Communication Systems (ICCS)*, Shenzhen, China, December 14-16, 2016.
- [C3] X. Li, **H. Chen**, S. Li, Q. Gao, C. Gong, and Z. Xu, "Volterra-based nonlinear equalization for nonlinearity mitigation in organic VLC," *The 13th International Wireless Communications & Mobile Computing Conference (IWCMC)*, Valencia, Spain, June 26-30, 2017.
- [C4] R. Xu, **H. Chen**, and Z. Xu, "The near-field radiation pattern of an OLED panel and its application in detection," *The 11th International Symposium on Communication Systems, Networks, and Digital Signal Processing (CSNDSP)*, Budapest, Hungary, July 18-20, 2018.
- **Chinese Patent:** Organic visible light communication system and Volterra series based nonlinear adaptive equalizer (Application No. 201710612310.2).