

CHUANMIN JIA

CONTACT	Institute of Digital Media, S2728, School of EE & CS, Peking University, Haidian District, Beijing 100871, China http://www.jiachuanmin.site Google Scholar	✉ cmjia@pku.edu.cn
RESEARCH INTERESTS	<ul style="list-style-type: none">• Video Processing• Light Field Image Compression• Machine Learning	
EDUCATION	New York University (NYU) , New York, U.S. <ul style="list-style-type: none">• Visiting Scholar• Advisor: Prof. Yao Wang Peking University (PKU) , Beijing, China <ul style="list-style-type: none">• <i>Ph.D.</i> candidate in Computer Science• Advisor: Prof. Siwei Ma and Prof. Wen Gao Beijing Univ. of Posts. & Telecom. (BUPT) , Beijing, China <ul style="list-style-type: none">• <i>B.Eng</i> in Computer Science and Technology• Overall GPA 86.7/100, rank: 10%• Thesis: Research on Compressed Video Enhancement and GPU Acceleration. (in Chinese)	Dec. 2017 – present Sep. 2015 – present Sep. 2011 – Jul. 2015
RESEARCH EXPERIENCE	Tandon School of Engineering , New York University <ul style="list-style-type: none">• <i>Research Assistant</i> Institute of Digital Media , Peking University <ul style="list-style-type: none">• <i>Research Assistant</i> Institute of Computational Linguistics , Peking University <ul style="list-style-type: none">• <i>Research Intern</i> Innovation Research Center , Beijing Univ. of Posts. & Telecom. <ul style="list-style-type: none">• <i>Research Intern</i>	Dec. 2017 – present Sep. 2014 – present Feb. 2014 – Aug. 2014 Aug. 2013 – Mar. 2014
JOURNAL PAPERS	<ul style="list-style-type: none">• Siwei Ma, Xinfeng Zhang, Jian Zhang, C. Jia, Shiqi Wang and Wen Gao “Nonlocal In-Loop Filter: The Way Toward Next-Generation Video Coding?,” <i>IEEE MultiMedia</i> 23 (2), 16-26.	
CONFERENCE PAPERS	<ul style="list-style-type: none">• C. Jia, S. Wang, X. Zhang, S. Wang and S. Ma, “Spatial-Temporal Residue Network Based In-Loop Filter for Video Coding”, Accepted by IEEE Visual Communications and Image Processing (VCIP), St. Petersburg, Florida, USA, Dec, 2017. (Oral)• C. Jia, Y. Yang, X. Zhang, S. Wang, S. Wang and S. Ma, “Light Field Image Compression with Sub-apertures Reordering and Adaptive Reconstruction”, <i>Proc. of the Pacific-Rim Conference on Multimedia (PCM)</i>, Harbin, China, Sept, 2017. (Oral) (Best Paper Award)	

- **C. Jia**, Y. Yang, X. Zhang, S. Wang, X. Zhang, S. Wang and S. Ma, "Optimized Inter-view Prediction Based Light Field Image Compression with Adaptive Reconstruction", *Proc. of IEEE International Conference on Image Processing (ICIP)*, grand challenge for LF image coding, Beijing, China, Sept, 2017. (Oral)
- **C. Jia**, X. Zhang, J. Zhang, S. Wang and S. Ma, "Deep Convolutional Network based Image Quality Enhancement for Low Bit Rate Image Compression," *Proc. of IEEE Visual Communications and Image Processing (VCIP)*, Chengdu, China, Nov. 2016. (Oral)
- J. Zhang, **C. Jia**, N. Zhang, S. Ma, and W. Gao, "Structure-driven Adaptive Non-local Filter for High Efficiency Video Coding (HEVC)," *Proc. of IEEE Data Compression Conference (DCC)*, Snowbird, Utah, USA, Mar. 2016. (Oral) (**Top Conference in Data Compression**)
- J. Zhang, **C. Jia**, S. Ma, and W. Gao, "Non-Local Structure-Based Filter for Video Coding," *Proc. of IEEE International Symposium on Multimedia (ISM)*, Miami, Florida, USA, Dec. 2015. (Oral)

HONORS AND AWARDS

- One of **Best Reviewers** of the IEEE Visual Communication and Image Processing (VCIP) conference, 2017
- **Best Paper Award** of the Pacific-Rim Conference on Multimedia (PCM) conference, 2017
- 1st prize of Video Big Data Compression Contest of the National Graduate Contest on Smart-City Technology. 2016
- Excellent Graduation Thesis Award, Beijing Univ. of Posts. & Telecom. 2015
- Innovation Scholarship (Collaborative Innovation Center for Future Media Network). 2015
- Honorable Mention Winner in American Mathematical Contest in Modeling. 2014

PROFESSIONAL ACTIVITY

REVIEWER

- IEEE International Conference on Multimedia and Expo (ICME). (since Dec 2017)
- IEEE International Symposium on Multimedia (ISM). (since Aug 2017)
- IEEE Visual Communication and Image Processing (VCIP). (since July 2017)
- Journal of Visual Communication and Image Representation (JVCIR). (since Oct 2016)

CONFERENCE ORAL PRESENTATIONS AND INVITED TALKS

- Spatial-Temporal Residue Network Based In-Loop Filter for Video Coding, *VCIP2017, St Petersburg, FL, America, Dec. 2017*
- Light Field Image Compression with Sub-apertures Reordering and Adaptive Reconstruction, *PCM2017, Harbin, China, Sep. 2017*
- Optimized Inter-View Prediction Based Light Field Image Compression With Adaptive Reconstruction, *ICIP2017, Grand Challenge for Light Field Image coding, Beijing, China, Sep. 2017*
- Deep Convolutional Network based Image Quality Enhancement for Low Bit Rate Image Compression, *VCIP2016, Chengdu, China, Nov. 2016*

SELECTED PROJECTS

View Synthesis Optimization,

Apr. 2016 - Sep. 2016

- Optimizing an open-source view synthesis software using CUDA. Achieving 6x acceleration, with real time FHD (1080P) view synthesis over 40fps.

NFC Tour Guide,**Aug. 2013 - Mar. 2014**

- Developed an Android app using NFC for tourism. Mainly responsible for implementing of NFC pay, speech tour guide and database interface design.

Flower Recognition,**Jul. 2013 - Sep. 2013**

- Proposed recognition algorithm by combining histogram and contour feature with linear classifier. iOS app development and recognition algorithm implementation.

SKILLS

- Programming: C/C++, CUDA, MATLAB, Power Shell, Python, \LaTeX .
- Operating System: Mac OS X, Ubuntu Linux, Windows
- Libraries/Frameworks: Caffe, MXNET, Tensorflow, HEVC/H.265, AVS2
- Github Repo: <https://github.com/codersadis>

Last updated: Monday 18th December, 2017