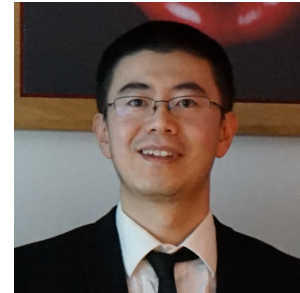


# Guanqun CAO

	Born in Beijing, P.R. China (1986) Long-term EU resident (P-EU)
<b>CEVT</b>	Sr Machine Learning Engineer
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## BRIEF INTRO

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I am an automotive engineer and entrepreneur with strong background in data mining, pattern recognition and image processing. Meanwhile, I remain engaged in academic activities and collaborations.

## SEVERAL HIGHLIGHTS

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- 12 years R&D in multimedia analysis and data mining, and 5 years in automotive industry.
- Full-stack data analysis from applied statistics, data mining to data operation (DataOps).
- Adaptive to dynamic work place, a great team player, and excited to work in a diverse team.
- Beijing-born and EU-educated. Used to study or work for long term in 6 European countries.
- PhD leading to top publications, and hold privileged engineering degrees and several awards.

## EDUCATION

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<b>Tampere University</b> , Tampere, Finland PhD (with Distinction) in Computing Science	12/2011—04/2018
<b>CIMET Master Erasmus Mundus</b> , Univ. Jean Monnet, France; NTNU, Norway; Univ. of Granada, Spain M.S. in Color Informatics and Media Technology	09/2008—09/2010
<b>Huazhong University of Science and Technology</b> , Wuhan, Hubei Province, P.R. China B.Eng in Electronic & Information Engineering	09/2004—06/2008
<b>University of Birmingham</b> , Birmingham, UK B.Eng( <i>Hons</i> ) in Electronic & Computer Engineering	10/2007—06/2008

## WORK EXPERIENCE

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1. Project Leader & Sr Machine Learning Engineer at CEVT AB. Jan 2022 - Currently
  - Define the project strategy and craft solutions towards the direction “MedTech on Wheels”.
  - Conception and lead a talented team of software developers, business developer, UX designer as well as medical expert.
  - Client facing and sales to global OEMs
  - Build up core competence in biomedical data analytics
  - Write proposals to national funding agencies
  - China: Evaluate radar suppliers and support ZEEKR product planning for health monitoring
2. Sr Data Scientist / Deep Learning Engineer at Volvo Cars. Apr 2018 - Dec 2021  
Data analytics for safety assurance of autonomous driving
3. Visiting research fellow at Tampere University, Finland and Wuhan University, China. Jan. 2019 - Currently
4. Contract Researcher (Consultant) at Intel Finland Corp. Sept. 2017 - Apr. 2018
  - Machine learning in mobile imaging in the NSF CVDI programme together with Business Finland.
5. Contract Researcher (Consultant) at Tieto Oy, Sept. 2016 - Aug. 2017
  - Work on research project of ‘Comparative Knowledge Discovery: Analyzing, Understanding and Visualizing Rankings’ in the site of the NSF CVDI programme.
6. Visiting researcher to University of Louisiana at Lafayette and University of Virginia, April 2017.
  - Multi-facet object ranking.
7. Researcher at Tampere University of Technology, Jan. 2010 - Dec. 2017
  - researched and developed new feature descriptors for large scale scene recognition techniques collaborated with Alma Media
  - researched on image/object segmentation techniques
  - took part in MSR-Bing challenge 2013 and develop automation tools on the supercomputer for training machine learning models
  - researched on large scale learning algorithms in the cloud
  - supervised 1 master thesis worker on machine learning for color constancy with Intel
8. Research assistant at Laboratoire Hubert Curien, French National Center for Scientific Research (CNRS). 2009.7-2009.8  
Blur identification, perceptual image quality assessment.

## PUBLICATIONS

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Google Scholar Link: <https://scholar.google.com/citations?hl=en&user=owGiCUkAAAAJ>

## TALKS

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- “Geo-spatial Data Mining Using **R!**”, Why R? 2020 Conference.
- “How will Big Data transform our life?”, to students of France Telecom, at New Factory Tampere, July, 2014

## HONORS

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1. Tampere University Graduation Award for PhD with Distinction (€1,500), 2020.
2. Travel Grant (€3000) for Excellent PhD Researchers in Guangdong Innovation Programme, Oct 2019
3. Best student paper award at IEEE IPTA 2016.
4. Member of the 2nd winning team in Microsoft Research-Bing challenge 2014
5. Erasmus Mundus Scholarship (€42,000 in total) funded by the European Union, Aug 2008 to Aug 2010
6. Technicolor award for the project contest winners in 2009 (€1,500 in total)
7. International Studentship, University of Birmingham, October 2007

## SKILLS AND HOBBIES

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**Professional skills:** Machine/Statistical/Deep Learning, Embedded & Cloud Computing, Multimedia Information Retrieval, Image Processing.

**Computer skills:** Python, Shell Scripting, Matlab, R, Latex, C/C++, GIMP, Linux

**Device capability:** Spectral photometer, spectral colorimeter, SMI high-frequency eyetracker

**Language Skills:** English (excellent), French (intermediate), Spanish (basic), Chinese (native).

**Professional services:** IEEE Member. Reviewers for IEEE Trans. on Cybernetics, IEEE Trans. on Vehicular Technology, Journal of Visual Communication and Image Understanding, International Conference on Image Processing 2018-2021. Member and Contributor at ML Commons.

**Hobbies:** Swimming, photography, archery, backpacking.