

Carlos Bermejo

PhD

CV

+852 9383 6446

✉ cbf@connect.ust.hk

📄 solrac1986.github.io/homepage/

Education

- 2016/02–2021/07 **Ph.D. in Computer Science & Engineering**, The Hong Kong University of Science and Technology (HKUST), Hong Kong.
- **Ph.D. Thesis:** "*Privacy and Privacy Enhancing Technologies for Post-GDPR Ubiquitous Computing*," under supervision of **Prof. Pan Hui**
- 2004/09–2012/12 **M.Sc. in Telecommunication Engineering (Diploma + M.Sc.)**, University of Oviedo, Gijon, Spain.
- **M.Sc. Thesis:** "*Social Behavior in Delay Tolerant Networks*," under supervision of **Prof. Roberto Garcia**

Work Experience

- 2013/07–2015/12 **Software Developer**, MKPayment Solutions GmbH.
- **Achievements**
 - *Business Intelligence Tool.* Development of an interactive web-based analytic tool to visualize the payment platform's transaction performance (Java, Data Warehousing, BI- Pentaho, Groovy/Grails, HTML/JavaScript/D3, Tomcat)
 - *Fraud Detection System.* Development of a real-time fraud detection system using business logic and time series analysis to detect and prevent anomalies in transactions' behavior (Business Logic-Drools, Groovy/Grails, RabbitMQ, Python, R)

Research Experience

- 2017/06–2017/07 **Internship**, Fraunhofer Heinrich Hertz Institute HHI, Vision & Imaging Technologies, under supervision of Paul Chojecki.
- **Exploring Button Designs for Mid-air Interaction in Virtual Reality**
Evaluation of the feasibility of 2D/3D alike buttons in VR together with distal haptic feedback
- 2011/08–2012/12 **Freelance-Researcher**, Deutsche Telekom Laboratories, Berlin.
- **Mobile/web-based application**
Development of an Android application to study users' altruism behavior according to battery levels in Opportunistic Networks (Java/Android, HTML/JavaScript, AWS, MTurk)
- 2009/06–2009/08 **Internship**, Deutsche Telekom Laboratories, Berlin.
- **Has Anyone Seen My Goose?**
Development of mobile Social Network for Developing Regions. The application provides services including friend searching and resource sharing using Delay Tolerant Networks, [Poster SIGCOMM 2009] (DTNs) (Java ME, JUnit)

Academic Visit

2018/02–2018/06 **Visiting researcher**, University of Helsinki, mobile computing group (NODES), under supervision of Prof. Sasu Tarkoma and Prof. Pan Hui.

- **Project Description**

Seeing is Believing? Effects of Visualization on Smart Device Privacy Perceptions. Augmented reality privacy assistant for visualizing the privacy of smart devices
PARA: Privacy Management and Control in Emerging IoT Ecosystems using Augmented Reality. Privacy assistant to manage the privacy of smart devices and protect users' personal information

Publications

Conferences

- [Carlos Bermejo](#), Petteri Nurmi, Pan Hui, "Seeing is Believing? Effects of Visualization on Smart Device Privacy Perceptions," *Proceedings of the 29th ACM International Conference on Multimedia (MM)*, 2021.
- [Carlos Bermejo](#), Lik-Hang Lee, Petteri Nurmi, Pan Hui, "PARA: Privacy Management and Control in Emerging IoT Ecosystems using Augmented Reality," *The 23rd ACM International Conference on Multimodal Interaction (ICMI)*, 2021.
- [Carlos Bermejo](#), Dimitris Chatzopoulos, Dimitrios Papadopoulos, Pan Hui, "This Website Uses Nudging: MTurk Workers' Behaviour on Cookie Consent Notices," *The 24th ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW)*, 2021.
- [Carlos Bermejo](#), Lik-Hang Lee, Paul Chojecki, David Przewozny, Pan Hui, "Exploring Button Designs for Mid-air Interaction in Virtual Reality: A Hexa-metric Evaluation of Key Representations and Multi-modal Cues," *ACM SIGCHI 13th Engineering Interactive Computing Systems (EICS)*, 2021.
- [Carlos Bermejo](#), Dimitris Chatzopoulos, Pan Hui, "EyeShopper: Estimating Shoppers' Gaze using CCTV Cameras," *Proceedings of the 28th ACM International Conference on Multimedia (MM)*, 2020.
- [Carlos Bermejo](#), Tristan Braud, Ji Yang, Shayan Mirjafari, Bowen Shi, Yu Xiao, Pan Hui, "VIMES: A Wearable Memory Assistance System for Automatic Information Retrieval," *Proceedings of the 28th ACM International Conference on Multimedia (MM)*, 2020.
- Dimitris Chatzopoulos, [Carlos Bermejo](#), Zhanpeng Huang, Arailym Butabayeva, Rui Zheng, Morteza Golkarifard, Pan Hui, "Hyperion: A wearable augmented reality system for text extraction and manipulation in the air," *Proceedings of the 8th ACM on Multimedia Systems Conference (MMSys)*, 2017.

Journals

- [Carlos Bermejo](#), Pan Hui, "A survey on haptic technologies for mobile augmented reality," *ACM Computer Surveys*, 2021.
- Dimitris Chatzopoulos, [Carlos Bermejo](#), Sokol Kosta, Pan Hui, "Offloading computations to mobile devices and cloudlets via an upgraded nfc communication protocol," *IEEE Transactions on Mobile Computing*, Volume 19, Issue 3, 2019.
- Dimitris Chatzopoulos, [Carlos Bermejo](#), Ehsan ul Haq, Yong Li, Pan Hui, "D2D task offloading: A dataset-based Q&A," *IEEE Communications Magazine*, Volume 57, Issue 2, 2018.
- Dimitris Chatzopoulos, [Carlos Bermejo](#), Zhanpeng Huang, Pan Hui, "Mobile augmented reality survey: From where we are to where we go," *IEEE Access*, 2017.

Book chapters

- Carlos Bermejo, Dimitris Chatzopoulos, Pan Hui, Gunnar Karlsson, "Human Behavior in Crowd-Assisted Computing and Networking," *Crowd Assisted Networking and Computing*, Book, Page 49, 2018.

Workshops

- Carlos Bermejo, Tristan Braud, Pan Hui, "Implementing GDPR for Mobile and Ubiquitous Computing," *The 23rd International Workshop on Mobile Computing Systems and Applications (HotMobile)*, 2022.
- Carlos Bermejo, Ting Wu, Xiang Su, Pan Hui, "Optimal Seeds Discovery of Traffic Congestions," *IEEE 36th International Conference on Data Engineering Workshops*, 2020.
- Carlos Bermejo, Zhanpeng Huang, Tristan Braud, Pan Hui, "When augmented reality meets big data," *IEEE 37th International Conference on Distributed Computing Systems Workshops*, 2017.
- Carlos Bermejo, Dimitris Chatzopoulos, Pan Hui, "How sustainable is social based mobile crowdsensing? an experimental study," *IEEE 24th International Conference on Network Protocols*, 2016.
- Carlos Bermejo, Rui Zheng, Pan Hui, "An empirical study of human altruistic behaviors in opportunistic networks," *Proceedings of the 7th International Workshop on Hot Topics in Planet-scale mObile computing and online Social neTworking*, 2015.

Under revision

- Carlos Bermejo, Dimitris Chatzopoulos, Dimitrios Papadopoulos, Pan Hui, "Conceptualizing Individuals' Notions of Privacy," *The ACM Web Conference 2022*, [under revision].

Honors & Awards

- SENG Top RPg Award by the Office of Postgraduate Studies of HKUST 2017-18
- Overseas Research Award by the Office of Postgraduate Studies of HKUST 2017-18
- M.Sc. Honor Distinction by the University of Oviedo 2012

Teaching Experiences

- Fall 2019 **Teaching Assistant**, Introduction to Computing with Excel VBA, The Hong Kong University of Science and Technology, Hong Kong.
- Fall 2018 **Teaching Assistant**, Introduction to Computing with Excel VBA, The Hong Kong University of Science and Technology, Hong Kong.
- Fall 2017 **Teaching Assistant**, Computer Architecture, The Hong Kong University of Science and Technology, Hong Kong.
- Fall 2016 **Teaching Assistant**, Operating Systems, The Hong Kong University of Science and Technology, Hong Kong.

Skills

- **Languages (IT)**
Python, R, Java, Groovy, JavaScript, HTML, CSS, C/C++

- **Machine Learning**
Keras/Tensorflow, PyTorch, NLP (NLTK)
- **Databases**
MySQL, MongoDB
- **Data Visualization**
Matplotlib, Ggplot2, Plotly
- **Frameworks, Development tools, Software**
Angular, Node.js, Pentaho, Drools, Agile Software Development (JIRA)
- **Mathematics, Research**
Machine Learning, Statistical Analysis, Behavioral Science, Computer Vision, Data Visualization, Business Intelligence

Languages

- **Language: Spanish** Level
Native
- **Language: English** Level
Full Professional Proficiency
- **Language: German** Level
Professional Working Proficiency

References

- **Prof. Pan Hui**
Department of Computer Science and Engineering
School of Engineering
The Hong Kong University of Science and Technology
Hong Kong
panhui@cse.ust.hk
- **Prof. Petteri Nurmi**
Department of Computer Science
University of Helsinki
Finland
petteri.nurmi@helsinki.fi
- **Prof. Shengsui Song**
Division of Integrative Systems and Design
School of Engineering
The Hong Kong University of Science and Technology
Hong Kong
eeshsong@ust.hk