

Bektur Ryskeldiev, PhD

Postdoc at Digital Nature Group, MEXT and Heidelberg Laureate Scholar
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EDUCATION

UNIVERSITY OF AIZU

PhD in Computer Science
2015-2018

UNIVERSITY OF AIZU

MSc in Computer Science
2013-2015

AMERICAN UNIVERSITY OF CENTRAL ASIA

BA in Software Engineering
2008-2012

LINKS

Web: apolotary.com

SKILLS

TECHNOLOGIES

- Spatial Media
- Mobile XR
- Media Streaming
- Affective Interfaces
- Telepresence
- Accessibility
- Social Computing

LANGUAGES

- ObjC
- C / C# / C++
- Python
- R
- Pure Data
- Max/MSP

EXTRACURRICULAR

FOUNDER OF:

eXtending Reality Tokyo
eXtending Reality Bishkek
Japan Mechanical Keyboard Group
Tokyo Mechanical Keyboard Meetup

PRESENTER AT:

eXtending Reality Bishkek (2018)
SIGGRAPH Spotlight (since 2017)
Tokyo iOS Meetup (2014-2017)
Bishkek Developer Meetup (2016-2017)
Tokyo Mechanical Keyboard Meetup
(2016-2017)

EXPERIENCE

UNIVERSITY OF TSUKUBA | Postdoctoral Research Fellow

JST CREST xDiversity researcher at Digital Nature Group led by Prof. Yoichi Ochiai
since April 2018 (until March 2020)

NTT LABORATORIES | Research Intern at Musashino R&D Center

Research internship on video streaming quality control.
August - September 2017

ACM SIGGRAPH

VRCAI Conference Publicity Co-chair (2019)

Managing conference announcements and communications

S3: SIGGRAPH Student Services (since 2017)

Invited resume reviewer and mentor for applicants interested in XR & HCI research

International Resources Committee Team Leader (since 2017)

Managing the Audio Guides and Podcasts Team

Student Volunteer Program Team Leader (2016-17)

Managing Student Volunteers at Emerging Technologies and VR Village sections

Student Volunteer Program (2015-2017)

Student Volunteer at ACM SIGGRAPH and ACM SIGGRAPH Asia conferences

UNIV. OF APPLIED SCIENCES DÜSSELDORF | Visiting Researcher

Worked on real-time mixed reality broadcasting studios, telepresence, and VR
interfaces under the guidance of Prof. Jens Herder at VSVR laboratory.
February 2017

COMPUTER ARTS LABORATORY | Research Assistant

Worked on spatial audio and wireless distributed and multimodal interfaces under
the guidance of Prof. Michael Cohen and Prof. Julián Villegas.
2013-2018

HELIUM9 GAMES | Mobile Consultant, Unity Developer

Integrated proprietary AI technology for iOS-based Unity game project
2015-2016

AIZULAB | iOS Developer

Developed application for control of distributed smart house systems.
2014-2015

SIBERS | iOS Developer

Image and audio processing, QA, training and supervision of junior developers
2011-2013

AWARDS / SCHOLARSHIPS / GRANTS

- 2019 Heidelberg Laureate Forum (selected as one of 200 young researchers)
- 2019 JSPS Grant-in-Aid for Early-Career Scientists
- 2018 ACM SIGGRAPH Asia 2018 Doctoral Consortium
- 2018 ACM SIGGRAPH 2018 Thesis Fast Forward
- 2017 ACM SIGCHI 2018 Doctoral Consortium
- 2017 University of Aizu Graduate School Information Fair, Best Poster 2nd Place
- 2017 ACM SIGGRAPH Turing Award Celebration Grant
- 2017 First place in IoT Section at FUKUSHIMA Hackathon 2017
- 2016 First place in IoT Section at IoT x Security Hackathon 2016
- 2015 Best Poster award 3rd prize at ACM SIGGRAPH VRCAI Conf.
- 2013 Best Paper prize at Tohoku-Section Joint Convention
- 2013 MEXT Scholarship for Master's (2013) and PhD (2015) programs

PUBLICATIONS

Showing 10 most recent publications, full list: <http://apolotary.com/References/full.htm>

- [1] J. Herder, S. Takeda, K. Vermeegen, T. Davin, D. Berners, and **B. Ryskeldiev**. Mixed reality art experiments - immersive access to collective memories. In *ISEA*, 2019 (accepted).
- [2] H. Hasada, Z. Junjian, K. Yamamoto, **B. Ryskeldiev**, and Y. Ochiai. AR cooking: Comparing display methods for the instructions of cookwares on ar goggles. In *HCII*, 2019 (accepted).
- [3] J. Herder, N. Brettschneider, J. de Mooij, and **B. Ryskeldiev**. Avatars for co-located collaborations in HMD-based virtual environments. In *IEEE VR*, 2019.
- [4] K. Yamamoto, R. Iwasaki, T. Minagawa, R. Kawamura, **B. Ryskeldiev**, and Y. Ochiai. BOLCOF: Base optimization for middle layer completion of 3d-printed objects without failure. In *ACM SIGGRAPH*, 2018.
- [5] **B. Ryskeldiev**, Y. Ochiai, M. Cohen, and J. Herder. Distributed metaverse: creating decentralized blockchain-based models for peer-to-peer sharing of virtual spaces for mixed reality applications. In *9th Augmented Human Int. Conf.*, 2018.
- [6] **B. Ryskeldiev**, T. Igarashi, J. Zhang, Y. Ochiai, M. Cohen, and J. Herder. Spotility: Crowdsourced telepresence for social and collaborative experiences in mobile mixed reality. In *ACM CSCW*, 2018.
- [7] **B. Ryskeldiev**, M. Cohen, J. Herder, and Y. Ochiai. Reactspace: Spatial-aware user interactions for collocated social live streaming experiences. In *IEEE Int. Conf. on Systems, Man, and Cybernetics (SMC)*, 2018.
- [8] **B. Ryskeldiev**, M. Cohen, and J. Herder. Streamspace: Pervasive mixed reality telepresence for remote collaboration on mobile devices. In *IPSJ J. of Information Processing, Special issue of "Advances in Collaboration Technologies"*, 2018.
- [9] **B. Ryskeldiev**. Spatial social media: Towards collaborative mixed reality telepresence "on the go". In *CHI'18 Extended Abstracts*, New York, NY, USA, 2018. ACM.
- [10] **B. Ryskeldiev**, M. Cohen, and J. Herder. Demo: Applying rotational tracking and photospherical imagery to immersive mobile telepresence and live video streaming groupware. In *SIGGRAPH Asia Symp. on Mobile Graphics and Interactive Applications*, 2017.

ACADEMIC TALKS

ACM SIGGRAPH Asia

Selected speaker for **ACM SIGGRAPH Asia 2018 Doctoral Consortium**

Invited speaker for **CG in Asia session** (2018)

Organizer for **Understanding Asia: Focus Japan session** (2018),

and **BoF: What Makes a Good Keyboard? Discussion on Design and Development of Custom Tactile Input Devices** (2018)

ACM SIGGRAPH

Selected speaker for **ACM SIGGRAPH 2018 Thesis Fast Forward** program

Invited speaker for **CG in Asia session** (2018)

Organizer for **SIGGRAPH in Japanese + Japan CG Showcase session** ([2017](#), [2018](#))

University of Aizu Graduate School Information Fair

2016-2017

Presented posters and live demonstrations of current research projects on applications of spatial data to social media streaming.

International Symposium on Spatial Media

2015, 2018

Presented a demo for "Exploring Virtual Sound Environments with Mobile Devices" paper (2015) and StreamSpace (2018)

PAPER REVIEWS

ACM SIGCHI 2019 | Associate Chair for Late Breaking Work section

Paper reviewer at:

ISMAR 2019*, **ACM SIGGRAPH 2018**** (Posters), **ACM SIGGRAPH Asia 2018**** (Emerging Technologies), **IEEE SMC 2018***, **ACM SIGCHI 2018**** (Late Breaking Work), **ARTECH 2017***, **JVRB (2016-2017)***, **ACE (2016)***

* - full papers, ** - extended abstracts