Benjamin Lee

+614 2366 3902 | Benjamin.Lee@visus.uni-stuttgart.de | benjaminchlee.github.io

RESEARCH INTERESTS

I am a postdoctoral researcher at the University of Stuttgart, Germany. I received my PhD from Monash University, titled "Surfaces and Spaces in Immersive Analytics". Immersive Analytics is the use of virtual and/or augmented reality technologies to support visual data exploration and presentation. At present, my main research topic is on situated visualisation. My work has also investigated how 2D surfaces can be used inside of an immersive 3D space to facilitate (collaborative) visual analysis and data understanding.

RESEARCH EXPERIENCE

Postdoctoral Researcher   Feb 2023 - Present

University of Stuttgart, Stuttgart, Germany
 - Supervisors: Prof. Dieter Schmalstieg, Prof. Michael Sedlmair
 - Research topics: Immersive analytics, situated visualisation, visualisation grammars, hybrid user interfaces, tangible interaction

PhD Student   Feb 2019 – Jan 2023

Monash University, Melbourne, Australia
 - Advisors: Prof. Tim Dwyer, A/Prof. Bernhard Jenny, Dr. Maxime Cordeil, Dr. Arnaud Prouzeau
 - Thesis Title: Surfaces and Spaces in Immersive Analytics

Research Intern   June 2019 - Sept 2019

Microsoft Research, Redmond, Washington, USA
 - Visualisation and Interactive Data Analysis Group
 - Working with Steven Drucker, Dave Brown, Bongshin Lee

Honours Student   Feb 2018 - Nov 2018

Monash University, Melbourne, Australia
 - Advisors: Prof. Tim Dwyer, A/Prof. Bernhard Jenny, Dr. Maxime Cordeil
 - Thesis Title: Heterogeneous Mixed-Reality Display Environments for Immersive Visual Analytics

EDUCATION

PhD in Immersive Analytics   Feb 2019 – Jan 2023

Monash University, Melbourne, Australia
 - Advisors: Prof. Tim Dwyer, A/Prof. Bernhard Jenny, Dr. Maxime Cordeil, Dr. Arnaud Prouzeau
 - Thesis Title: Surfaces and Spaces in Immersive Analytics

Bachelor of Informatics and Computation Advanced (First Class Honours)   2015 - 2018

Monash University, Melbourne, Australia
 - Advisors: Prof. Tim Dwyer, A/Prof. Bernhard Jenny, Dr. Maxime Cordeil
 - Thesis Title: Heterogeneous Mixed-Reality Display Environments for Immersive Visual Analytics

TEACHING

FIT5147 – Data Visualisation and Exploration (Admin TA)	Semester 2 2021 – Semester 1 2022
FIT5147 – Data Visualisation and Exploration	Semester 1 2021
FIT3146 – Makerlab	Semester 2 2020
FIT5147 – Data Visualisation and Exploration	Semester 1 2020

Monash University, Melbourne, Australia

ACADEMIC SERVICE
  - Reviewer:
    - 2023: CHI, Frontiers in, JCSS, TVCG, UIST, VIS, VR
    - 2022: CHI, MobileHCI, ISMAR, VIS, VR (Journal Track), VR (Conference Track)
    - 2021: EuroVis, ISMAR, ISS (Summer Round), ISS (Winter Round), VIS
    - 2020: CHI, VIS
  - Student Volunteer: VR 2022, OzCHI 2020

AWARDS
  - ACM CHI 2022 Honourable Mention Award
  - ACM ISS 2021 Honourable Mention Award
  - IEEE VIS 2020 Honourable Mention Award (InfoVis)
  - Monash Information Technology Industry-Based Learning Placement Scholarship
  - Monash Summer Research Scholarship
  - Monash Information Technology Excellence Scholarship

TECHNICAL SKILLS
 Proficient in: C# .NET, Unity, R, D3, Python, JavaScript
 Familiar with: Git, HLSL, OpenGL, HTML/CSS, SQL, Java, Arduino, C, Processing, FRP

PUBLICATIONS (SELECTED)
Benjamin Lee, Arvind Satyanarayan, Maxime Cordeil, Arnaud Prouzeau, Bernhard Jenny, Tim Dwyer. Deimos: A Grammar of Dynamic Embodied Immersive Visualisation Morphs and Transitions. In CHI Conference on Human Factors in Computing Systems (CHI '23).

Benjamin Lee, Maxime Cordeil, Arnaud Prouzeau, Bernhard Jenny, and Tim Dwyer. A Design Space for Data Visualisation Transformations Between 2D and 3D in Mixed-Reality Environments. In CHI Conference on Human Factors in Computing Systems (CHI '22). **[Honourable Mention Award]**

Jim Smiley, Benjamin Lee, Siddhant Tandon, Maxime Cordeil, Lonni Besançon, Jarrod Knibbe, Bernhard Jenny, and Tim Dwyer. The MADE-Axis: A Modular Actuated Device to Embody the Axis of a Data Dimension. In Proceedings of the ACM on Human-Computer Interaction, 2021. **[Honourable Mention Award]**

Benjamin Lee, David Brown, Bongshin Lee, Christophe Hurter, Steven Drucker, and Tim Dwyer. Data Visceralization: Enabling Deeper Understanding of Data Using Virtual Reality. In IEEE Transactions on Visualization and Computer Graphics, 2020. **[Honourable Mention Award]**

Benjamin Lee, Xiaoyun Hu, Maxime Cordeil, Arnaud Prouzeau, Bernhard Jenny, and Tim Dwyer. Shared Surfaces and Spaces: Collaborative Data Visualisation in a Co-located Immersive Environment. In IEEE Transactions on Visualization and Computer Graphics, 2020.