GUANGYU DU

dugy.guangyu@gmail.com   www.dugyu.com

My passion is forging long-lasting social connections to alleviate the growing loneliness in the coming decades. Along my diverse and interdisciplinary journey, I am expanding my focus from designing physical spaces to creating digital realms via computational interactive media. I envision a future where AI-driven environments can respond to our memories and emotions, thus helping us build high-quality relationships in the evolving worlds.

WORK EXPERIENCE

ALIBABA CLOUD   Hangzhou, China
Senior Data Engineer   Oct 2021 - Present
· Drive cross-disciplinary innovation in City Brain Algorithm and Industrial LLM Platform R&D. Promoted in Feb 2024, took on different roles (Algorithm/Front-end/Data) in response to organizational restructuring and business realignment
· Research on multimodal content understanding and generation for next-generation AI-driven analytics product
· Launched the first LLM Agent demo, *Narrator* (Chat + GeoBI + Vis), in the department, which helped secure leading clients in key industries. Coordinated algorithm engineers, product designers, and front-end & back-end developers on integrating novel AGI HCI paradigms into the industrial AI Agent platform, curated AI Agent sample rooms
· Designed a visualization framework, *Metaphor*, for City Brain applications. Established a method of systematically constructing the composite business scenarios from low-level graphics. The developed vis-analysis module was a pivotal factor in winning a top-tier project bid and has also emerged as a highlight of the Hangzhou City Brain 2.0

MIT SENSEABLE CITY LAB   Cambridge, MA, USA
Data Visualization Specialist, Research Fellow   Aug 2020 - Sep 2021
· Collaborated with physicists, social scientists, planners, engineers, and designers to investigate built environments and human mobility at the urban scale. Created data visualizations to inspire, facilitate, and communicate research
· Designed the interactive visualization *Wanderlust* for the *Nature* research on the visitation law. Transformed abstract equations and complex phenomenons into artistic dynamic diagrams and 3D real-time renderings. Pioneered the way for visualizing mobility flows. Vis paper published in IEEE Vis Art Program, interactive vis exhibited in MIT Museum
· Initiated and formulated the research and visualization of *Favelas4D*, using LiDAR point clouds to analyze the urban morphology of informal settlements. Project featured in designboom, Dezeen, ArchDaily, CNN Brazil, and EL PAÍS

EDUCATION

HARVARD UNIVERSITY, GRADUATE SCHOOL OF DESIGN   Cambridge, MA, USA
Master in Design Studies, Technology   2018 - 2020
· Awarded Distinction in Computational Design as the lead programmer in the top team, worked as a teaching assistant in the following year, and guided 60+ students from Harvard and MIT on 30+ final projects
· Awarded 'Best Projects' in Data Visualization, Immersive Landscape (Representation through Gaming Technology)
· A/High Pass in core subjects: Computer Graphics, Computer Vision, Responsive Environments, Public Projection

Cross-registered, Massachusetts Institute of Technology   2019 Spring - Fall
· GPA 4.0/4.0, Artificial Intelligence, Intelligent Multimodal User Interfaces, Architecture in Motion Graphics

TSINGHUA UNIVERSITY, SCHOOL OF ARCHITECTURE   Beijing, China
Bachelor of Architecture   2012 - 2016
· GPA 3.9/4.0 (Rank 3 / 98), Beijing Outstanding Graduate, Class of 2017 (finished 5-year degree in 4 years)
· Doctoral Studies in Parametric Architectural and Urban Design, Future Scholar Fellowship   2016 - 2018

INTERNSHIP

MICROSOFT   Beijing, China
Software Engineering Intern   2019 Summer
· Redesigned the HoloLens underwater showcase with the concept of reviving the *Classic of Mountains and Seas,* integrated modeling, texturing, and rigging, programmed real-time interaction with ink wash style ancient creatures
· Built a shared mixed-reality across multiple devices using Unity, ASP.NET Web App, and Azure Spatial Anchor

ROBERT A.M. STERN ARCHITECTS   New York, NY, USA
Architectural Intern   2016 Summer
· Produced detailed design drawings and arranged the CAD sheet set for the Design Development Phase

ADDITIONAL INFORMATION

· Area of Concentration: Computational Design, Real-Time Rendering, Interactive Graphics, and Data Visualization, with Three.js/D3.js + JavaScript, Unity + C#, OpenGL + C++, Rhinoceros + C#/Python
· Interests: Cello, Snowboarding, Photography, Editing, Drawing