

ROB SNYDER JANUARY 2021

EDUCATION

UNIVERSITY OF KENTUCKY, LEXINGTON, KENTUCKY – BACHELOR OF ARCHITECTURE, 1996

EXPERIENCE

FOUNDER, TANGERINE, LEXINGTON, KENTUCKY 2016-PRESENT

Conceived of, and authored a next-generation media innovation specification that carries forward the concept of drawing-model fusion. Tangerine emphasizes research and innovation development that helps people (and machines) see and understand what they're looking at in complex visual environments, in Virtual Design and Construction applications and other industries. Tangerine's Media Innovation Spec 2018 will have a secondary effect, on cognitive computing. See our slide deck: Tangerine Update 2018

GRAEBERT GMBH, BERLIN, GERMANY 2019-2020

In the role of BIM Features Product Owner, I helped the development team design and implement a system that creates and updates DWG CAD drawings from IFC and Revit BIMs linked into a CAD app.

TOPA3D, BEND, OREGON 2018

I worked as part of ToPa3D's reality capture team providing laser scanning and photogrammetry services in the construction market.

APPLIED RESEARCH GROUP, BENTLEY SYSTEMS, EXTON, PENNSYLVANIA 2008-2015

Product Manager, MicroStation Platform Development Group, and researcher in Applied Research Group, AR/VR/MR research. Invented "hypermodel": conceived of the concept of the automatic infusion of drawings in-situ within models, persuaded the company to develop it, was a key part of the team that designed and managed its implementation. I present some highlights of my work here: Earlier Media Innovations (2012)

OWNER, MCKAY SNYDER, LEXINGTON, KENTUCKY 2005-2008

Co-founder, architecture firm, commercial clients

DESIGN TECHNOLOGY SUPPORT, NBBJ, COLUMBUS, OHIO 2003-2005

Firm-wide support for BIM process and visualization (LA, SF, NY, SEATTLE, LONDON offices); People's Choice Award winner (firm-wide, 2004); Service Award Winner (firm-wide, 2004)

DESIGNER AND PM, EOP ARCHITECTS, LEXINGTON, KENTUCKY 2000-2003

Produced construction drawings and BIM models. Design and Project management role on several projects

DRAFTER, DESIGN +, INC, LOUISVILLE, KENTUCKY 1998-2000

Produced construction drawings and BIM models

DRAFTER, ADW ARCHITECTS, CHARLOTTE, NORTH CAROLINA 1996-98

Produced construction drawings

RADAR OPERATOR, US NAVY 1985-92

Operated ship's radar, navigation, and communications equipment.

PATENTS

INTEGRATED ASSEMBLAGE OF 3D BUILDING MODELS AND 2D CONSTRUCTION DRAWINGS

Patent Issued Nov 3, 2015, US **9177085** See patent <http://1.usa.gov/1Hx33bZ>

MULTI-DIMENSIONAL ARTIFACT ASSEMBLAGE FOR INFRASTRUCTURE AND OTHER ASSETS WITH INTERFACE NODE MEDIATORS

Patent Issued Jul 5, 2016, US **9384308** See patent <http://bit.ly/2ifKkpB>

HYPERMODEL-BASED PANORAMA AUGMENTATION

Patent Issued Oct 4, 2016 US **9460561** Integrated Assemblage of 2D Drawings and Panoramic Images. See patent <http://bit.ly/2iFxGRF>

DYNAMIC AND SELECTIVE MODEL CLIPPING FOR ENHANCED AUGMENTED HYPERMODEL VISUALIZATION

Patent Issued Sep 12, 2017, US **09761045** See patent <https://encrypted.google.com/patents/US9761045>

PUBLICATIONS

FOCUS DEVICES IN HYBRID DATA: USEFULNESS IN DESIGN THINKING AND COMMUNICATION

Oct 1, 2014, Proceedings of the Design Communication Conference, published in book form and online in PDF. Our paper is on pages 300-305 at the link above.

Coauthors: Rob Snyder, Mark O'Bryan (The Design Studio, University of Kentucky), Hugo Mulder (PhD Fellow at IT University of Copenhagen), Stéphane Côté (Bentley)

OFFLINE SPATIAL PANORAMIC VIDEO AUGMENTATION FOR VISUAL COMMUNICATION IN THE AEC INDUSTRY

Nov 1, 2013, Proceedings of the 13th International Conference on Construction Applications of Virtual Reality, London, November 2013

Coauthors: Stéphane Côté (Bentley), Julien Barnard (Dept. of computer science, Université Laval, Québec, Canada) Rob Snyder, Renaud Gervais (Bentley)

LIVE MOBILE PANORAMIC HIGH ACCURACY AUGMENTED REALITY FOR ENGINEERING AND CONSTRUCTION

Nov 1, 2013 Proceedings of the 13th International Conference on Construction Applications of Virtual Reality (CONVR) 2013, London, November 2013

Coauthors: Stéphane Côté (Bentley), Rob Snyder, Philippe Trudel, Marc-Antoine Desbrien, Mathieu Giguere (Bentley)

AN AUGMENTED REALITY TOOL FOR FACILITATING ON-SITE INTERPRETATION OF 2D CONSTRUCTION DRAWINGS

Nov 2013 Proceedings of the conference on Construction Applications of Virtual Reality (CONVR 2013), London, November 2013

Coauthors: Rob Snyder, Stéphane Côté (Bentley), Philippe Trudel, Renaud Gervais (Bentley)

RECOMMENDATIONS

STÉPHANE CÔTÉ - AUGMENTED REALITY RESEARCH SCIENTIST AT BENTLEY SYSTEMS JANUARY 6, 2016, STÉPHANE MANAGED ROB DIRECTLY

"I've had the privilege and pleasure of working with Rob Snyder for 4 years within the innovation team at Bentley Systems. Rob is a truly unique individual. He has this rare ability to quickly see the concept behind the tool and, from various view points simultaneously, to constantly fine tune a concept, playing with new ideas, until he merges the set into a unified theory that explains and simplifies everything. Very curious and eager to learn from others, he is never short of ideas and of appropriate questions, and is always willing to share his passion."

VOLKER MUELLER - CREATIVELY RESOLVING AEC CHALLENGES WITH COMPUTATIONAL DESIGN, AT BENTLEY SYSTEMS NOVEMBER 30, 2015, VOLKER MANAGED ROB DIRECTLY

"While working with Rob at NBBJ I appreciated his enthusiasm for intelligent, advanced, and progressive approaches to using digital technologies in the architectural profession. His enthusiasm has grown out of first hand experience with traditional ways of practice and the immediate benefits that can arise from prudent implementation of emerging technologies to improve work flows and results. Rob's enthusiasm did not prevent him from being a patient coach to colleagues, providing systematic, on-the-project guidance to them, enabling them to adopt

process changes and helping them to adapt to technology changes affecting almost every aspect of their work. He has been using existing technologies to innovate building design practices and work flows beyond what the creators of the technologies intended, and this way inspired further changes in technologies, most notably the ideas underlying hyper-modeling."

SUNAND SANDURKAR - SOFTWARE ENGINEER AT BENTLEY SYSTEMS NOVEMBER 29, 2015, ROB WORKED WITH SUNAND IN THE SAME GROUP

"Rob and I worked together on a key project in Bentley. He conceptualized the idea of embedding CAD drawings back into the model so user doesn't have to ever leave the model in order to visualize dimensions, annotations and line work of each drawing. Rob has great insights on the uses of traditional drawings to enhance the understanding of the model. With his thinking and concepts, Rob will certainly be an asset to any organization."

MARK SMITH - DIRECTOR OF SOFTWARE DEVELOPMENT, APPLIED RESEARCH AT BENTLEY SYSTEMS NOVEMBER 24, 2015, MARK WORKED WITH ROB IN DIFFERENT GROUPS

"I've had the pleasure to work with Rob on several student research projects. He is an inspiring leader, teacher and visionary. His excitement about BIM, Augmented Reality and Reality Modeling is truly contagious."

AARON SCALES - OWNER / DIRECTOR AT BROCOLOCO MAY 4, 2010, AARON REPORTED DIRECTLY TO ROB

"Rob is an absolute inspiration! Not only is he brilliantly forward thinking in his work, a fearless pioneer, he is a great friend and, though conducting himself with such intelligence, is completely well-grounded and congenial. He is excitable, interesting and forever avant-garde. I will be his biggest fan in anything he decides to do and will fight to make some contribution if opportunity presents."

AWARDS

Service Award, NBBJ 2004

People's Choice Award, NBBJ 2004

Tangerine Media Innovation and Cognitive Computing

Helsingborg, Sweden

+46 709324255 @robsnyder3333 robsnyder@tangerinefocus.com <https://www.linkedin.com/in/robsnyder3333/>