

John Bacus

Professional Experience

Interim Director Undergraduate Program, Teaching Ass't. Professor

Fall 2022 - present; ATLAS Institute, University of Colorado at Boulder

Responsible for daily operation of the BS-CTD undergraduate degree program in the ATLAS Institute of the University of Colorado at Boulder.

Lecturer

Spring 2023; ATLAS Institute, University of Colorado Boulder

ATLS 4010-001: Capstone Projects: Is the defining creative project in the career of a CTD student. Based on prior research (see Research Methods & Professional Practice), this course is designed for students to put into practice the technical skills and creative concepts they have acquired throughout their undergraduate career and also make important professional connections.

ATLS 1100-011: Design Foundations: "The goal of this course is to teach students how to use fundamental design concepts effectively and compellingly in their work. Through lectures, class discussions, in-class exercises, projects and critiques, this course will cover the critical, theoretical, and technical skill sets necessary to become a more engaging, thoughtful, and articulate designer."

Fall 2022; ATLAS Institute, University of Colorado Boulder

ATLS 4000-002: Research Methods and Professional Practices: Lays the foundation for students to produce culminating work in their major. In this course, students will engage in domain exploration, learn to define a research problem, utilize tools and methods for professional design research, refine presentation skills, and engage in iterative and collaborative work.

2017 - Spring 2022; ATLAS Institute, University of Colorado at Boulder

ATLS 4519-090/091: Product Management Studio: "...we will explore the role and function of Product Management with a practical, studio-oriented method. In other words, you'll build a real product and get it to market over the course of the semester."

ATLS ATLS 4/5519-008: Digital Sketching: "This class is for designers learning to use digital techniques to be better designers. Together in this class, we will explore design through the practice of sketching; through drawing, model-making, simulation, and computation. Students will learn practical sketching skills in a multitude of media, but also the historical and philosophical content in which they operate."

Vice President of Product Management, Trimble Construction Platform

2021 - 2022; Trimble Inc., Westminster, Colorado, United States

Responsible for a new corporate platform strategy, leading a complex transformation effort bridging previously disconnected product portfolios across Trimble's Architecture, Engineering, and Construction sectors.

Senior Director of Product Management, Design & Engineering Group

2020 - 2021; Trimble Inc., Westminster, Colorado, USA

Responsible for new product development and cross-divisional strategy for Trimble's Design & Engineering Group, including SketchUp, Tekla, Trimble Connect, Novapoint (Quadri), and other related products and solutions.

Director of Product Management, Architecture & Design Division

2012 - 2020; Trimble Inc., Westminster, Colorado, USA

Product Management Director for SketchUp, SketchUp Pro, SketchUp API/SDK, 3D Warehouse, and other products in Trimble's Architecture, Design, and Collaboration portfolios.

Product Manager, SketchUp

2006 - 2012; Google Inc., Boulder, Colorado, USA

Product Manager for SketchUp, SketchUp Pro, SketchUp API/SDK; Initiated development of LayOut, 2D page design for SketchUp models

Director of Product Design

2002 - 2006; @Last Software Inc., Boulder, Colorado, USA

Member of the startup team for SketchUp, simple but powerful 3D modeling for designers; responsible primarily for Product Management and Design of SketchUp for macOS

Designer

1996 - 2002; CommArts Inc., Boulder, Colorado, USA

Held a variety of design consulting roles on environmental design projects around the world; co-founded an internal digital design group to expand CommArts design capabilities into new digital and hybrid spaces

Draftsman

1995 - 1996; O.M. Ungers GmbH., Berlin, Germany

Member of the technical documentation team for a variety of architectural projects in the city of Berlin, Germany including the Messe Berlin expansion.

Volunteering

Co-Chair, Board of Advisors

ATLAS Institute, University of Colorado, Boulder, 2017 - present

Scoutmaster

Scouts BSA Troop 78, Boulder, Colorado, 2018 - 2020

Team Coach

FIRST Lego League, "Nutty Narwhals", Boulder, Colorado, 2014 - 2016

Architecture Instructor

Cooper Union Saturday Program, 1992 - 1994

Education

Rice University

MArch., Architecture, 2002 - 2004

Wolfram Research

NKS Summer School, 2003

The Cooper Union for the Advancement of Science and Art

BArch., Architecture, 1988 - 1994

The High School for the Performing and Visual Arts

Dipl. Cum Laude, Fine Art, 1984 - 1988

Awards & Certifications

Best of Show

2002; IDG/Macworld, "SketchUp for Mac OS X"

Thesis Prize

2004; Rice University School of Architecture

George R. Ledlie Award; AIA/NY Scholarship

1992; Cooper Union School of Architecture

Pratt National Talent Search, Architecture

1988; Pratt Insitute, New York, NY

Eagle Scout

1984; BSA Troop 655, Houston, Texas

Patents & Publications

Books

Digital Sketching: Computer-aided Conceptual Design, Wiley, Dec 8, 2020

Patents

"3D modeling system distributed between a client device web browser and a server," US 10,868,890 · Issued Dec 12, 2020

"Providing a Real-Time Shared Viewing Experience in a Three-Dimensional Modeling Environment," US 9,898,852 B2 · Issued Feb 20, 2018

"Managing satellite and aerial data in a composite document," US 9411901 · Issued Aug 9, 2016

"Editing element attributes of a design within the user interface view, and applications thereof," US 9,405,433 · Issued Aug 2, 2016

"Efficient distribution of functional extensions to a 3D modeling software," US 9,223,593 · Issued Dec 29, 2015

"Controlling rights to a drawing in a three-dimensional modeling environment," US 9,218,692 · Issued Dec 22, 2015

"Multi-function affine tool for computer-aided design," US 9146660 B2 · Issued Sep 29, 2015

"Managing Web Page Data in a Composite Document," US 9076244 B2 · Issued Jun 7, 2015

"Method for creating an annotated angle with user-specified points, and applications thereof," US 9,047,709 · Issued Jun 2, 2015