Mandi Pretorius | PhD Student, Yale Architecture | Architect (Reg. SACAP) | M.Arch (Prof), MSc Architecture
mandi.pretorius@yale.edu

Research Interests Building-integrated Water Capture, Treatment, Distribution & Reclamation / Solar Water Disinfection / Solar Power / Renewable & Abundant Earth Materials / Built Environment Biodiversity & Biocompatibility / Building Ecosystems / Health & Well-being / Environmental Psychology & Eco-aesthetics / Embodied Phenomenology

EDUCATION

Current /

PhD Student , Yale School of Architecture

Research Affiliate , Yale Center for Ecosystems in Architecture

Graduated /

Master of Science ; 2017
Architectural Science (Concentration in Built Ecologies),
Center for Architecture Science & Ecology, Rensselaer Polytechnic Institute, Troy NY, USA

Masters in Architecture (Professional) ; 2011
Graduated with Distinction. University of Cape Town, Cape Town

Bachelor of Architectural Studies ; 2008
Graduated with Distinction. University of Cape Town, Cape town

PROFESSIONAL EXPERIENCE

Metropolis Design CC / Design & Project Architect / Cape Town, 2012 – 2015
Performed in the capacity of Design Architect & Project Architect on a range of projects. Projects range from high-end residential design, to the concept design & development of retail & commercial fit-outs. Select projects required custom furniture design for manufacture.

Urban Initiatives / Intern Architect / London, 2009
Project emphasis on masterplan proposals at city & district scale, modeling of housing typologies & site surveying / data collection. Proposals were limited to towns & cities in UK &Ireland.

PJCarew Consulting / Intern Architect / Cape Town, 2008
Project emphasis on passive/ low energy solutions for buildings Internship role included modeling of proposed passive building systems and design of infographics as part of client correspondence.

CERTIFICATIONS

Licensed Architect
Registered Professional, SACAP
South Africa

AWARDS

South African Institute of Architects, SAIA Award 2016
Award of Excellence | New Residence, 79 Brommersvlei Road

Cape Institute of Architects Award of Merit | New Residence, 79 Brommersvlei Road

South African Council for the Architectural Profession
University of Cape Town Best Architectural Student Award over 6 years of study, 2011

Cape Institute of Architects
The Best Student Graduating in the Postgraduate Architecture Degree Program, 2011

South African Institute of Architects
Best Student based on final two years of study for a professional degree in Architecture, 2011

Scholarship | Fully Funded PhD, Yale University 2018-present

Scholarship | Fully Funded MSc Architectural Sciences, Rensselaer Polytechnic Institute 2016-2018

Scholarship | Reuben Stubbs Award, 2011

Scholarship | Manuel & Luby Washkansky Scholarship*, 2011*

PUBLICATIONS & CONFERENCES

IEEE Games Entertainment & Media / Paper Presentation
Mandi Pretorius, Phoebe Mankiewicz, Mohamed Aly-Etman, Nick Novelli & Anna Dyson, “Exploring visual and non-visual 'biophilic' impacts on human health using experimental methods in simulated abiotic and biotic environments,” 2019

MSc Thesis / Rensselaer Polytechnic Institute
Mandi Pretorius, “Towards Built Ecologies: A Consideration of Multi-systemic Bioresponsive Behaviors within Architectural Systems,” 2017

EXHIBITION & DEMONSTRATION

UN Environment Assembly / Public Demonstration
Yale University Interdisciplinary research into Building-integrated Dye-Enhanced Solar Water Disinfection, including demonstration of a functional to-scale research prototype.
Yale Cohort: Anna Dyson, Jaehong Kim, Nick Novelli, Eric Ryberg, Mandi Pretorius

TOOLS

BIM Autodesk Revit
2D Drawing Autodesk CAD
3D Modeling Rhinoceros, Grasshopper (Ladybug, Honeybee)
Analysis Climate Consultant
Adobe Suite (InDesign, Illustrator, Photoshop, AfterEffects, Acrobat)
Office Word, Excel, PowerPoint
Languages English Native, Afrikaans