

## **KIM DUPONT-MADINIER**

Coconut Grove, FL, USA / madinierkim@gmail.com / 786-575-9733  
www.kimdupontmadinier.com

### EDUCATION

---

#### **RHODE ISLAND SCHOOL OF DESIGN**

##### ***BFA & BArch***

- Double major in Architecture and Fine Arts, GPA 3.5 (Cum Laude)
- Dean's List, Architectural Thesis Award for design excellence, & ASTA Grant Award Recipient

**Providence RI, USA**

*Sep. 2010 - Jun. 2015*

#### **FULBRIGHT RESEARCH SCHOLARSHIP**

##### ***Research Scholar***

- Developing energy efficient Gers (Yurts) for the non-formal urban areas of Ulaanbaatar, Mongolia

**Ulaanbaatar, Mongolia**

*Sep. 2017 - Oct. 2018*

### EXPERIENCE

---

#### **ATELIER DUPONT-MADINIER, CEO & Founder**

**Boston MA & Scottsdale AZ, USA**

##### ***Project Management***

*Sep. 2021 - Dec. 2023*

- Led a laboratory for design dedicated to the development of next generation prefab homes
- Identified Product Market Fit, Go-To-Market strategy, Market size analysis (TAM, SAM, SOM),
- Awarded proprietary utility patent for an advanced energy efficient lightweight building envelope solution
- Collected customer insights, created a waiting list of 27 customers, and signed an MOU for 20 Units
- Pitched and raised 250K in addition to in-kind support
- Developed and managed fundamental accounting processes including construction budget, P&Ls, and balance sheets
- Optimized construction sequence to reduce construction time and managed schedules to effectively meet deadlines
- Built and managed an interdisciplinary team of 5 to effectively execute project design and new materials development
- Developed employment contracts, agreements, and customer contracts for design and build services
- Led team meetings to discuss project issues, technical issues, and coordination with other disciplines
- Oversaw the development of new materials according to ASTM and building code requirements
- Developed a strategic partnership with an industry partner for product development optimization & business model validation

##### ***Design***

- 3D printed prototypes with Laser Sintering (SLS) for customer insights & investor presentations
- Optimized design for multiple code and zoning requirements with consultants
- Led the design and build team to optimize the bio-mimetic integration of PV system with consultants
- Prepared, reviewed, and coordinated implementation documents to reduced CO2 footprint and build according to building code and ASTM standards
- Sourced, developed, and oversaw the application of advanced materials to meet the utility design patent and best practices
- Developed websites, product demo videos, brochures & re-branding based on shifts with target market insights

#### **SAINT-GOBAIN, Lead Design Engineer for UNITY & CertainTeed JDA**

**Northboro MA, USA**

##### ***Project Management***

*Sep. 2015 - Apr. 2021*

- Co-led team in developing designs for multiple system and assembly solutions for prefab applications
- Led project research with consultants and technical team to facilitate effective execution of project design
- Conducted customer insights with external stakeholders (architects, contractors, & homeowners) and internal stakeholders (manufacturing plants, product managers, and sales representatives) and synthesized insights to maximize profit
- Conducted design, manufacturing, installation, and testing Sprints using Agile Product Development
- Developed and managed prototyping budget
- Presented to key stakeholders, core team, and upper management; & promoted off-site construction on behalf of Saint-Gobain
- Managed the technical resolution and coordination of system and assembly designs with consultants and technical team
- Developed and managed production schedule, meeting deadlines, and meeting minutes for project coordination
- Wrote reports on project research, product development activities, and extensive code compliant testing

##### ***Design***

- Produced renders, brochures, and small scale prototypes using design thinking from customer insights
- Prototyped system and assembly designs in laboratory and conducted permanent on-site installation in customers homes under NDA
- Applied advanced physical fabrication and digital tools for design optimization based on value-chain constraints
- Collaborated with an interdisciplinary team of mechanical engineers, nuclear engineers, industrial designers, and contractors for FEA analysis and extensive testing to meet ASTM requirements for building materials
- Prepared, reviewed, and coordinated implementation documents of system and assembly designs according to building code and ASTM standards
- Designed and developed new system and assembly designs, patenting 17 design and utility patents for Saint-Gobain

**Fulbright Research Fellowship, Program Manager & Design Lead for the Passive Ger****Ulaanbaatar, Mongolia***Sep. 2017 - Oct. 2018***Project Management**

- Led the development of an urban-adapted energy efficient Ger (also known in the West as a Yurt) for Ulaanbaatar Mongolia low-income population to address a local air pollution crisis
- Conducted qualitative & quantitative market research, aligning the design with local initiatives and state incentive programs
- Conducted extensive fieldwork, living in the Ger Districts in the winter and interviewing 18 families to collect customer insights
- Prepared client presentations and presented design concepts and drawings
- Consolidated and synthesized research for homeowners & professional partners to identify an optimized solution across all scales of design and construction
- Sourced and managed local and international partnerships for energy & moisture performance assessments of the Passive Ger
- Cultivated local partnerships and built a local team to design, build, and sustain the development of the Passive Ger
- Communicated on-going project progress to internal team and external partners, in addition to lecturing at local institutions
- Lead all sponsorship efforts, raising \$62,000 locally & found an investor who purchased design to build 13 more
- Wrote a project report on research & presented project research extensively internationally
- Found local paying customer maintained client relationships throughout and post build

**Design**

- Led the design of the Passive Ger across all stages, from project design to construction implementation
- Performed product research and oversaw the appropriate application of code-compliant materials & systems to effectively meet the Passive House and low cost design criteria for the Passive Ger design
- Produced renders, brochures, architectural drawing sets, and prototypes using design thinking from customers & local partners

**Solar Decathlon Europe, Student Team Leader & Architectural Designer for Techstyle Haus****Providence RI, USA***Sep. 2011 - Aug. 2014***Project Management**

- Managed competition application, team, logistics, and events in Providence (USA), Erfurt (Germany), Versailles, Paris, and Lessac (France)
- Prepared client presentations and presented design concepts and drawings for the Domaine de Boisbuchet (Lessac, France), and coordinated the installation of Techstyle Haus
- Developed sponsorship strategies, marketing material, and project partnerships - raising over \$1.2 million in project funding
- Led the development of the innovative Passive House building envelope with an interdisciplinary team internally and externally to comply with US and French construction code and zoning requirements

**Design**

- Performed product research: sourcing code-compliant materials & systems evaluation for proper selections create the innovative prefabricated textile Passive House building envelope assembly
- Invented the hyperbolic and bio-mimetic prefabricated Passive House envelope in collaboration with internal and external partners to meet the Passive House Standard
- Designed, fabricated, and installed the innovative Passive House building envelope for off-site and on-site assembly
- Led an interdisciplinary team of textile designers and consultants for the innovative code compliant stoll knit interior finish
- Co-developed the bio-mimetic exterior building envelope and PV system with internal and external partners to meet the Passive House Standard and Net-Zero energy requirements
- Developed a rural-urban master plan for the Domaine de Boisbuchet in Lessac France

**SKILLS****Project Management**

Strong Presentation & Organizational Skills, Business Development, Cultivating Customer Relationships, Strong Knowledge of Sustainability and Integrated Design Guidelines, Market Size & Competitive Landscape Analysis, Go-to-Market Strategy, Product-Market Fit, Team Building, Fundraising, Sales, Gantt Chart & Budget Management, MS Office Suite, Adobe Acrobat, Advanced Knowledge of Building Codes and ASTM standards

**Design**

Bio-mimetic Design, Industrial Design, Architectural Design, Urban planning, Fabrication & Installation Drawings, Sustainable Design, Design for Manufacture, and Rendering. Proficiencies: Photoshop, InDesign, Illustrator, AutoCad, Rhino, Solidworks, Revit

**Advanced Prototyping**

CAD/CAM for Large-Format Machining (CNC milling, laser cutting, 3D printing, water jet), PU Casting, Rapid Prototyping & Finishing, Vacuum-forming, Welding & Sheet Metal, Woodworking, Material Testing for code compliance, Sewing & 3D Stoll Knitting, 1/1 Construction

**Additional**

Fluent in English and French (U.S. & French Nationality), Guest lecturer at MIT and 3 other universities internationally

**CERTIFICATIONS // AWARDS**

Harvard: Leading with Finance, Cornell: Project Management // Awards: 18 patents, Fulbright Research Scholarship & Extension