

# Qingru Mirah Xu

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## Education

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- 2019-2022 **Harvard University, Graduate School of Design** Cambridge, MA  
Candidate for Master in Design Studies, Energy and Environment  
*Building Science Hub Co-Chair, Queer in Design Alumni and Activism Chair*  
*Relevant Courses: Data Science; Creative Machine Learning for Design; Introduction to Computational Design; City Science; High-Performance Facade; DLab Schools; Space Conditioning Systems for Low-Carbon Buildings*
- 2014-2018 **Boston University, School of Engineering** Boston, MA  
Bachelor of Science, Computer Engineering  
*2018 Best Capstone Project Award in Electrical & Computer Engineering; Open Web BU Treasurer and Social Chair*

## Experience

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- 2021-2021 **Envi-Energy Studio, Inc** Boston, MA  
Energy Analyst  
  - Conducted energy analytics for 5 years data of all existing buildings in Greater Boston using Excel and Python
- 2019-2021 **Harvard University** Cambridge, MA  
Teaching Assistant | Research Assistant | Technical Assistant  
  - Prepared training materials and guided 14 students in landscape outdoor micro-climate comfort analysis
  - Assessed 3-years minute-by-minute HVAC data of a 24,000 sqm office building in Thuwal, Saudi Arabia and reported to researchers at Harvard Center for Green Buildings and Cities
  - Produced and implemented UI & UX for virtual open house and tutorial with Unreal Engine and Adobe XD and attracted 500+ visits
  - Invented and adapted an online virtual 3D printer in Unity for custom simulations for 100+ students
- 2020-2020 **Transsolar Energietechnik GmbH** New York, NY  
Climate Engineer Intern  
  - Researched, simulated, and evaluated a multitude of sustainable strategies for 10+ architectural projects
  - Drafted and compiled 8 client reports with 5 design leads using Adobe Illustrator, InDesign, and PowerPoint
- 2018-2019 **Eradicate Childhood Obesity Foundation, Inc** Cambridge, MA  
UI & UX Engineer  
  - Revamped and materialized UI & UX based on primary and secondary market researches and study groups
  - Led 5 engineers and 2 illustrators in a contest application and formulated overarching storyline in interviews
  - Organized a school play with 20+ elementary students for educating risk of added sugar in processed goods

## Projects

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- 2020-2020 **cGan Daylight Factor in Office Space | M.I.T. and Spacemaker** Cambridge, MA  
Designer and Developer | Python, DIVA, Grasshopper  
  - Designed and developed grasshopper scripts for predicting offices' daylight quality using Pix2Pix algorithm
  - Generated dataset by simulating daylighting qualities in 60 floorplans and 2160 models
- 2019-2019 **GreenForm | Harvard University** Cambridge, MA  
Lead Designer and Developer | C# and Grasshopper  
  - Composed and reformed automatic 1000 building geometric generation and performance evaluation
  - Proposed and devised high-level architecture system and collaborated with 2 other students; created and presented for 50+ guests audiences
- 2019-2019 **GH# | Harvard University** Cambridge, MA  
Code Reviewer and Developer | C#, Grasshopper  
  - Implemented C# scripts imitating native Grasshopper surface components for teaching 50+ students
  - Oversaw 3 developers for refining function definitions and behaviors for performance and style consistency
- 2017-2018 **Compos | Boston University** Boston, MA  
Lead Design and Web Developer | HTML5, Vue.js, and Sketch  
  - Drafted and built UI, UX, and front-end of an interactive website reflecting real-time patients indoor location
  - Organized and conducted interviews with nurses in local assisted living facility for system requirements

## Skills

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- Design Rhino, SketchUp, Sketch, InVision, Adobe Creative Suite, Light Room, Premier Pro, Oil Paint, and Pencil Ladybug Tools, DIVA, Climate Studio, CONTAM, FloVent, and Design Builder
- Programming Python, C#, MATLAB, HTML5, Javascript, Grasshopper, Unreal Engine, Unity, and Visual Studio
- Language Mandarin, Cantonese, and English