**ARCH 3691 Advanced Design and Building Information Modeling February 2013**

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| **Your Name:** | Cheng Lin |
| **Name of Project:** | Canada |
| **Preference:** | No |
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| **Use of Passive Solar Strategies** |
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| **Use of Sustainable strategies** |
| Highly efficient energy recovering system. |
| **Use of Technology** |
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| **Use of materials** |
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| **Photovoltaic strategy** |
| Operates on 93% optimal efficiency |
| **What strategy would you copy? What is the greatest strength?** |
| Based on the result of this project, I guess the hot water system must be very good. |
| **What is the greatest weakness of the entry? What would you avoid?** |
| This building scored low on energy balance, so I’m going to assume its PV system wasn’t well design. |
| **Additional comments?** |
| What does the tepee has to do with anything? |

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| **Your Name:** | Cheng Lin |
| **Name of Project:** | China-Y |
| **Preference:** | No |
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| **Use of Passive Solar Strategies** |
| Green around the house |
| **Use of Sustainable strategies** |
| Recycling shipping container |
| **Use of Technology** |
| Split System Air conditioning |

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| **Use of materials** |
| Shipping Container |
| **Photovoltaic strategy** |
| PV panels |
| **What strategy would you copy? What is the greatest strength?** |
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| **What is the greatest weakness of the entry? What would you avoid?** |
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| **Additional comments?** |
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| **Your Name:** | Cheng Lin |
| **Name of Project:** | Florida-Flex House |
| **Preference:** | Yes |
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| **Use of Passive Solar Strategies** |
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| **Use of Sustainable strategies** |
| Natural Lighting on the north and south face of the building |
| **Use of Technology** |
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| **Use of materials** |
| Durable Energy efficientEasy to maintain None-ToxicRecyclableRecycled |
| **Photovoltaic strategy** |
|  |
| **What strategy would you copy? What is the greatest strength?** |
| The overall look and feel of the spaces |
| **What is the greatest weakness of the entry? What would you avoid?** |
| Since this house comes in last, there must be a lot of weaknesses |
| **Additional comments?** |
| Maybe we can integrate some of the other team’s technology to improve its result. |

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| **Your Name:** | Cheng Lin |
| **Name of Project:** | Hawaii-Hale Pilihonua |
| **Preference:** | No |
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| **Use of Passive Solar Strategies** |
| Solar panels |
| **Use of Sustainable strategies** |
| Cross ventilation |
| **Use of Technology** |
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| **Use of materials** |
| bio-based, fiber-reinforced polymer-strong and lightweight, resist corrosion,rot,termites |
| **Photovoltaic strategy** |
| Water cooled PV |
| **What strategy would you copy? What is the greatest strength?** |
| Solar thermal collectors for hot water |
| **What is the greatest weakness of the entry? What would you avoid?** |
| Solar panels on the side of the house which blocks the views |
| **Additional comments?** |
|  |

**ARCH 3691 Advanced Design and Building Information Modeling February 2013**

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| **Your Name:** | Cheng Lin |
| **Name of Project:** | Illinois-Rehome |
| **Preference:** | No |
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| **Use of Passive Solar Strategies** |
| Canopy for shadingSolar Panels |
| **Use of Sustainable strategies** |
| Grey water recycle |
| **Use of Technology** |
| iPad app |

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| **Use of materials** |
| Spray foam insulationWoodRecycle steel |
| **Photovoltaic strategy** |
| 24 high efficiency PV panels |
| **What strategy would you copy? What is the greatest strength?** |
| Pre-fabrication houseLay out of the rooms |
| **What is the greatest weakness of the entry? What would you avoid?** |
|  |
| **Additional comments?** |
|  |

**ARCH 3691 Advanced Design and Building Information Modeling February 2013**

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| **Your Name:** | Cheng Lin |
| **Name of Project:** | Maryland-Watershed House |
| **Preference:** | Yes |
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| **Use of Passive Solar Strategies** |
| Solar Thermal Wall- heat up water using the sunLiquid Desiccant Wall- reduce humidity |
| **Use of Sustainable strategies** |
| Natural Ventilation (cross breeze)Clerestories lightingGreen RoofGray water filtering system |
| **Use of Technology** |
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| **Use of materials** |
| WoodPlants |
| **Photovoltaic strategy** |
| Micro-inverters DC=>AC |
| **What strategy would you copy? What is the greatest strength?** |
| The solar thermal wallGrey Water being reused |
| **What is the greatest weakness of the entry? What would you avoid?** |
|  |
| **Additional comments?** |
|  |

**ARCH 3691 Advanced Design and Building Information Modeling February 2013**

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| **Your Name:** | Cheng Lin |
| **Name of Project:** | New York-Solar Roofpod |
| **Preference:** | No |
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| **Use of Passive Solar Strategies** |
| Glazed Window |
| **Use of Sustainable strategies** |
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| **Use of Technology** |
| Oxnilux “Bird-safe glass” |

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| **Use of materials** |
| Wood claddingSpray foam insulation |
| **Photovoltaic strategy** |
| 10.08kWAnti-reflective solar panelsPower the building below due to extra energy |
| **What strategy would you copy? What is the greatest strength?** |
| The anti-reflective coatingConnecting it to another home to provide them extra energy |
| **What is the greatest weakness of the entry? What would you avoid?** |
| Not ADA friendly |
| **Additional comments?** |
|  |

**ARCH 3691 Advanced Design and Building Information Modeling February 2013**

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| --- | --- |
| **Your Name:** | Cheng Lin |
| **Name of Project:** | New Zealand-First Light |
| **Preference:** | No  |
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| **Use of Passive Solar Strategies** |
| Canopy for shading |
| **Use of Sustainable strategies** |
| Highly efficient energy recovering system. |
| **Use of Technology** |
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| **Use of materials** |
| Renewable resource such as wool. Used up to 10” for insulationWood some of the Laminated Veneer Lumber (LVL)Concrete slab |
| **Photovoltaic strategy** |
| 28 polycrystalline photovoltaic panelsPanels consist of silicon wafersConvert solar radiations into direct current |
| **What strategy would you copy? What is the greatest strength?** |
| The use of materials such as wool for insulations |
| **What is the greatest weakness of the entry? What would you avoid?** |
| By examining the floor plan, I see a kitchen and behind it is a double door.I feel like the greatest weakness of this house is the layout of spaces. |
| **Additional comments?** |
|  |

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| --- | --- |
| **Your Name:** | Cheng Lin |
| **Name of Project:** | Parsons New School for Design |
| **Preference:** | No |
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| **Use of Passive Solar Strategies** |
| Solar Panel |
| **Use of Sustainable strategies** |
| Wrapped the livable space in a thick insulated envelope |
| **Use of Technology** |
| Hydropack? |

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| **Use of materials** |
|  |
| **Photovoltaic strategy** |
|  |
| **What strategy would you copy? What is the greatest strength?** |
|  |
| **What is the greatest weakness of the entry? What would you avoid?** |
|  |
| **Additional comments?** |
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**ARCH 3691 Advanced Design and Building Information Modeling February 2013**

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| --- | --- |
| **Your Name:** | Cheng Lin |
| **Name of Project:** | SCI-CHIP |
| **Preference:** | No |
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| **Use of Passive Solar Strategies** |
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| **Use of Sustainable strategies** |
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| **Use of Technology** |
| Connect to internet for weather updatesUse of Xbox Kinect and iPad to monitor the homeAutomated shades  |

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| **Use of materials** |
|  |
| **Photovoltaic strategy** |
|  |
| **What strategy would you copy? What is the greatest strength?** |
| Use waste heat from AC to heat up water |
| **What is the greatest weakness of the entry? What would you avoid?** |
| The look of the exteriorBed not ADA friendly |
| **Additional comments?** |
|  |

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| --- | --- |
| **Your Name:** | Cheng Lin |
| **Name of Project:** | Virginia-Tidewater |
| **Preference:** | Yes |
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| **Use of Passive Solar Strategies** |
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| **Use of Sustainable strategies** |
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| **Use of Technology** |
| Sensors at windows and door, to turn on/off HVAC system |

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| **Use of materials** |
| Rain screen |
| **Photovoltaic strategy** |
| PV panels |
| **What strategy would you copy? What is the greatest strength?** |
| Sunspace/porchSecret bedroom |
| **What is the greatest weakness of the entry? What would you avoid?** |
| The mix style of modern and 19th century England  |
| **Additional comments?** |
|  |