

EDUCATIONAL ASSIGNMENT for JOSEPH JOHN WUNDERLICH for his 3rd trimester of 10th grade

This assignment covers the following Educational Objectives (Subjects marked with a "■" are the main subject, and those marked with an "□" are secondary subjects):

- 1. READING (ENGLISH)
- 2. WRITING (ENGLISH)
- 3. ALGEBRA 2
- 4. CHEMISTRY
- 5. WORLD HISTORY
- 6. LATIN II
- 7. WORLD CULTURAL ARTS
- 8. PHYSICAL EDUCATION

ASSIGNMENT:

Help present the following co-authored peer-reviewed paper in London England in May, 2014:

Wunderlich, J.T. and Wunderlich, J.J. (2014). **Crowdsourced architecture and environmental design.** *2nd International Conference on Emerging Trends in Engineering and Technology (ICETET'2014, May 30-31, 2014 London (United Kingdom).*

JOSEPH'S WORK:

SUMMARY: The following presentation was co-created and co-presented by Joseph John Wunderlich with his Father in London, England on May 31st, 2014. The paper is available on-line here:

http://users.etown.edu/w/wunderjt/JOSEPH%20SCHOOL/Joseph%20WORK/Joseph_Assignment_PUBLICATION_TALK_2014_LONDON.pdf

CrowdSourced Architecture and Environmental Design

2nd International Conference on Emerging Trends in Engineering and Technology, May 30-31, 2014 London (United Kingdom)

Joseph T. Wunderlich PhD, Elizabethtown College, PA, USA
and Joseph John Wunderlich, USA



At the Conference (Father at front table as a Session Chair and judge):



Pictures taken of us as we presented will be posted later by conference organizers.



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Shapes Arrange Quick Styles Editing

Drawing



- ### AGENDA
- Case 1: United Nations Projects by Others
 - Case 2: Initial Designs
 - Case 3: Building on Public Servers in Creative Mode
 - Case 4: Building on Public Servers in Survival Mode
 - Case 5: Building on Public Faction Servers
 - Case 6: Creating a Protected Creative Server
 - Case 7: Creating a Protected Survival Server
 - Case 8: Creating Sustainable Towns
 - Case 9: Wellness Center Competition #1
 - Case 10: Creating a Digital-Circuit Design World
 - Case 11: Creating a Multi-World Server
 - Case 12: Rapid Prototyping Real-World Architectures
 - Case 13: Building College Campuses
 - Case 14: Group-build of Two Communities in Two Hours
 - Case 15: Group-build of Engineering Center in Two Hours
 - Case 16: Visit to Australian Architectural Server
 - Case 17: Creating a Japanese Group-Harmony Server
 - Case 18: Creating Four Japanese Towns
 - Case 19: Wellness Center Competition #2
 - Case 20: Creating a European Architecture World
 - Case 21: Creating a LEGO and ISO Green World

Joseph Thomas Wunderlich III, PhD Biography

1/2 Computer Engineer

1/2 Architect and Urban Designer



Case 4: Building on Public Servers in Survival Mode

Item	Amount	Item	Amount	Item	Amount
Food & materials	hunted, gathered, crafted				
AI Animal behavior	- flocking, herding				
	- Predators, prey				
	- they reproduce				
	- they can be tamed				



Microsoft Office Ribbon: Home, Insert, Design, Animations, Slide Show, Review, View, Add-Ins. Includes Font, Paragraph, Drawing, and Editing toolbars.

Case 8: Creating Sustainable Towns (College Freshmen)

ACTIVE SOLAR: Creatively angle solar panels towards the sun.

NATURAL DAY-LIGHTING: Maximize sunlight while not overlooking local MITIGATE COOLD NORTHERN WIND: but consider day-lighting and views.

COMMUNITY GARDEN: of edible plants – olive ground, irrigate, and foliage. Plant cereals, potatoes, etc.

COMMUNITY LIVESTOCK: Create animal pens & shelters; brood animals for meat and milk.

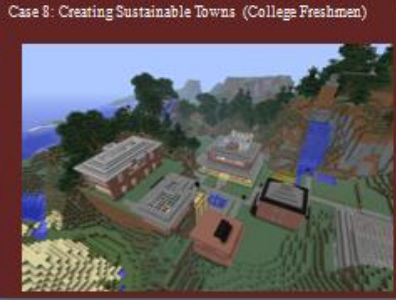
ARCHITECTURAL ESTHETIC: – livable and aesthetic on interior and exterior and complimentary to all else in village.

URBAN DESIGN and CITY PLANNING: Create PATHS, NODES, EDGES, CORRIDORS, and DISTRICTS including plazas, a central market, a central park, etc.

WELLNESS CENTER: designate a large lot to be used by visiting high-school students to build a Wellness Center in your town (with indoor pool, large activity room, and lockers).

EXTRA CREDIT: Make something electromechanical with circuits and logic gates.

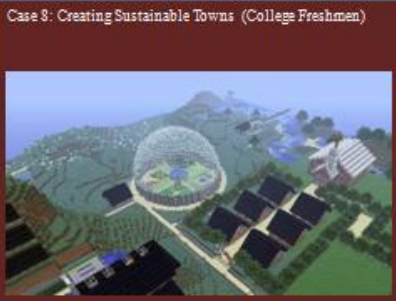
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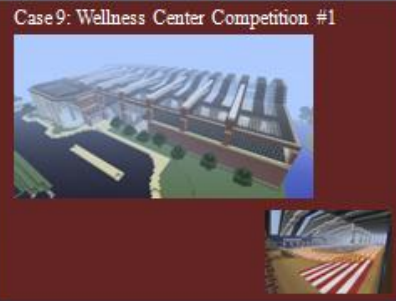
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Case 11: Creating a Multi-World Server

Wunderlich "Bojin" Server

For a more powerful server, a "BUCKET" server mod "CRAFTBUCKET" used to allow:

- 1. PLAYER RANKING:** Ops and Guest, Builder, Architect, Master, Admin, and Owner/master – each having many accumulated commands. Bucket plugins "ESSENTIALS," "PERMISSIONS," "CHAT," and "GROUPMANAGER" were configured.
- 2. SQL DATABASE SERVER and plugin "LOBBYKIT"** for logging player activity to allow rolling-back of "grinding" (destruction or construction by unwanted or misbehaving players). The initial release of Bojin server was public. Unfortunately, due to grinding (including organized grinding teams), Bojin was made private.
- 3. MULTIWORLD plugin** to allow concurrent worlds (and tele-transportation & gateways between). Bojin has six worlds.
- 4. Many other plugins** (full-language console, establishing monetary systems, allowing aircraft and vehicles to move, locking tool chests, signposting, etc.).

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Case 11: Creating a Multi-World Server

- Main World
- Survival World
- Digital Design World
- FYSworld (four GREEN towns)
- Two private worlds

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Case 11: Creating a Multi-World Server

- Main World
- Survival World
- Digital Design World
- FYSworld (four GREEN towns)
- Two private worlds

All players initially enter in town-center in Main World

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CrowdSourced Architecture and Environmental Design_PAPER_15_TALK_SUBMITTED_EDITED_Wu...

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Paste New Slide

Font Paragraph Drawing Editing

Case 12: Rapid Prototyping Real-World Architectures




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Case 12: Rapid Prototyping Real-World Architectures



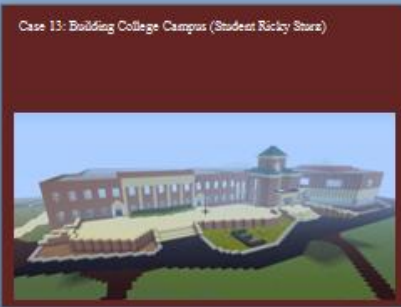
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Case 12: Rapid Prototyping Real-World Architectures



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Case 13: Building College Campus (Student Ricky Stora)



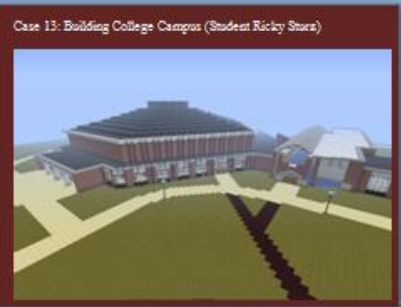
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Case 13: Building College Campus (Student Ricky Stora)



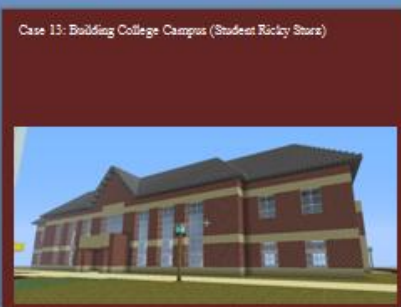
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Case 13: Building College Campus (Student Ricky Stora)



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Case 13: Building College Campus (Student Ricky Stora)




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Case 14: Group-build of two Dormitories in Two Hours



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Case 14: Group-build of two Dormitories in Two Hours



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Case 14: Group-build of two Dormitories in Two Hours



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Case 14: Group-build of two Dormitories in Two Hours



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Case 14: Group-build of two Dormitories in Two Hours



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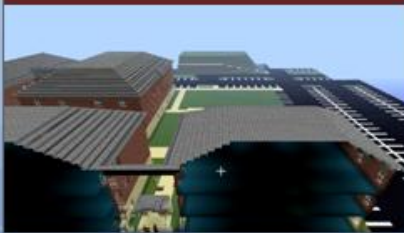
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B I U abc S AV Aa

Shapes Arrange Quick Styles

Case 14: Group-build of two Dormitories in Two Hours



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Case 14: Group-build of two Dormitories in Two Hours



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Case 14: Group-build of two Dormitories in Two Hours



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Case 15: Group-build of Engineering Center in Two Hours

ENGINEERING 280 "Engineering Research"
ENGINEERING 332 "Computer Organization & Architecture"
ENGINEERING 343 "Green Architectural Engineering "
PHILOSOPHY 275 "Science and Values"
FIRST YEAR SEMINAR 100 "Scientific Modeling for Sport"



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Case 15: Group-build of Engineering Center in Two Hours

ENGINEERING 280 "Engineering Research"
ENGINEERING 332 "Computer Organization & Architecture"
ENGINEERING 343 "Green Architectural Engineering "
PHILOSOPHY 275 "Science and Values"
FIRST YEAR SEMINAR 100 "Scientific Modeling for Sport"



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Case 15: Group-build of Engineering Center in Two Hours

ENGINEERING 280 "Engineering Research"
ENGINEERING 332 "Computer Organization & Architecture"
ENGINEERING 343 "Green Architectural Engineering "
PHILOSOPHY 275 "Science and Values"
FIRST YEAR SEMINAR 100 "Scientific Modeling for Sport"



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Case 15: Group-build of Engineering Center in Two Hours

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Case 15: Group-build of Engineering Center in Two Hours

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ENGINEERING 332 "Computer Organization & Architecture"
ENGINEERING 343 "Green Architectural Engineering "
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Case 16: Visit to Australian Architectural Server



Case 17: Creating a Japanese Group-Harmony Server

After J. Wunderlich and son visited Japan in 2013



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Font: 16, Bold, Italic, Underline, Text Color, Paragraph Color, Bullets, Numbering, Indentation, Alignment, Styles

Drawing: Shapes, Arrange, Quick Styles

Editing: Undo, Redo, Find, Replace, Copy, Paste

Case 17: Creating a Japanese Group-Harmony Server
After J. Wunderlich and son visited Japan in 2013



DISTRICTS –
*Tranquil
retreats*

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Case 17: Creating a Japanese Group-Harmony Server
After J. Wunderlich and son visited Japan in 2013



DISTRICTS –
*Tranquil
retreats*

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Case 17: Creating a Japanese Group-Harmony Server
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DISTRICTS –
*Tranquil
retreats*

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Case 17: Creating a Japanese Group-Harmony Server
After J. Wunderlich and son visited Japan in 2013



PATHS – Channel
water

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Case 17: Creating a Japanese Group-Harmony Server
After J. Wunderlich and son visited Japan in 2013



PATHS – Channel
water

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Case 17: Creating a Japanese Group-Harmony Server
After J. Wunderlich and son visited Japan in 2013



PATHS – Channel
water

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Case 17: Creating a Japanese Group-Harmony Server
After J. Wunderlich and son visited Japan in 2013



PATHS – Channel
*people on
water*

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Case 17: Creating a Japanese Group-Harmony Server
After J. Wunderlich and son visited Japan in 2013



PATHS – Channel
people on land

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Case 17: Creating a Japanese Group-Harmony Server
After J. Wunderlich and son visited Japan in 2013



PATHS – Channel
people on land

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Case 17: Creating a Japanese Group-Harmony Server
After J. Wunderlich and son visited Japan in 2013



PATHS and
EDGES –
Gateways

Case 17: Creating a Japanese Group-Harmony Server
After J. Wunderlich and son visited Japan in 2013



PATHS and
EDGES –
Gateways

Case 17: Creating a Japanese Group-Harmony Server
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NODES –
*Gathering
people*

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Clipboard Slides Font Paragraph Drawing Editing

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Shapes Arrange Quick Styles

Case 17: Creating a Japanese Group-Harmony Server
After J. Wunderlich and son visited Japan in 2013



NODES –
Gathering
people

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Case 17: Creating a Japanese Group-Harmony Server
After J. Wunderlich and son visited Japan in 2013



NODES –
Gathering
people

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Case 17: Creating a Japanese Group-Harmony Server
After J. Wunderlich and son visited Japan in 2013



NODES –
Gathering
people

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Case 18: Creating Four Japanese Towns (College Freshmen)

- Build a 160-1800's Japanese town and home including:
 - PASSIVE SOLAR
 - THERMAL MASS
 - NATURAL DAYLIGHTING
 - MITIGATED NORTHERN WIND
 - ARCHITECTURAL ESTHETIC

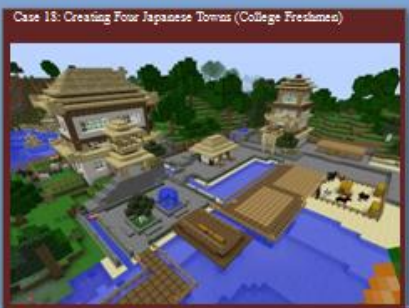
URBAN DESIGN: Create PATHS, NODES, EDGES, GATEWAYS, and DISTRICTS including a social market, central park with Japanese garden, community garden of edible plants (oil, sesame, plant carrots, potatoes, scotts, etc. and collards), livestock in animal pens (kiosk for milking and producing milk)

WELLNESS CENTER: designate a large lot to be used by visiting high school students to build a Wellness Center in your town (MEDITATION ROOM, TRANQUILITY POOL, AND JAPANESE GARDEN)

GROUP HARMONY: Architecture must be complementary to all else in village, and to group harmony ("WU") of the village

PRIVATE SPACE: Build a private Japanese garden with a pond

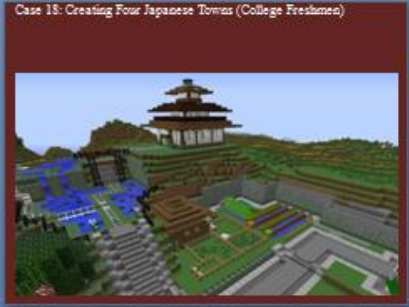
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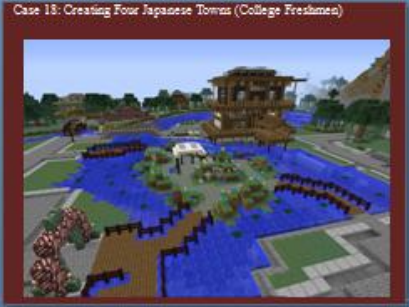
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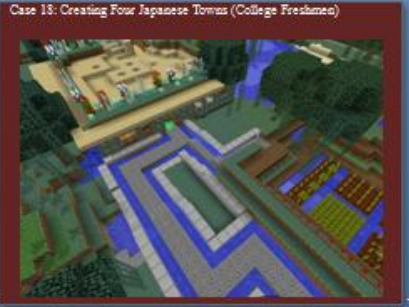
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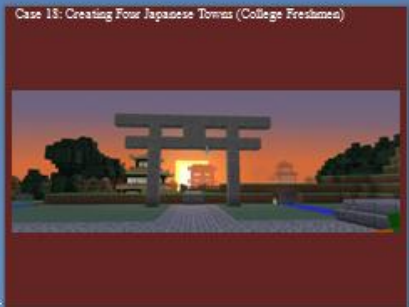
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Case 20: Creating a European Architecture World



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Case 20: Creating a European Architecture World



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Case 20: Creating a European Architecture World



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Case 20: Creating a European Architecture World



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Case 20: Creating a European Architecture World



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Case 20: Creating a European Architecture World



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Case 20: Creating a European Architecture World



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Case 21: Creating a LEED and ISO Green World



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Joseph's contributions to the publication:

- Of the 21 case studies discussed in the paper, he designed and implemented in software 100% of the architecture shown in the following Case Studies:
 - Case 2: Initial Designs
 - Case 3: Building on Public Servers in Creative Mode
 - Case 4: Building on Public Servers in Survival Mode
 - Case 5: Building on Public Faction Servers
 - Case 6: Creating a Protected Creative Server
 - Case 7: Creating a Protected Survival Server
 - Case 11: Creating a Multi-World Server
 - Case 12: Rapid Prototyping Real-World Architectures
 - Case 17: Creating a Japanese Group-Harmony Server
 - Case 20: Creating a European Architecture World
- Of the 21 case studies discussed in the paper, he helped configure the software, maintain the servers, and teach College students how to design, build, and work the software for:
 - Case 6: Creating a Protected Creative Server
 - Case 7: Creating a Protected Survival Server
 - Case 8: Creating Sustainable Towns
 - Case 9: Wellness Center Competition #1
 - Case 10: Creating a Digital-Circuit Design World
 - Case 11: Creating a Multi-World Server
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 - Case 18: Creating Four Japanese Towns
 - Case 19: Wellness Center Competition #2
 - Case 20: Creating a European Architecture World
- Took many of the approximately 1000 photographs selected from for this publication while visiting Japan on a 40-day 2013 trip to Narita, Osaka, and Kyoto Japan (and a Japanese part of Hawaii), and significantly contributed to a publication and keynote talk with his father in Osaka:

Wunderlich, J.T. and Wunderlich, J.J. (2013). **Green architecture and environmental design using rapid-prototyping social-networking sandbox tools, followed by professional architectural software.** *Asian Conference on Sustainability, Energy & the Environment (ACSEE 2013)*, June 6-9, Osaka, Japan.

This paper is available on-line:


http://users.etown.edu/w/wunderjt/Green_Social_Designs_Japan_paper_19.pdf

This talk is available online:

http://users.etown.edu/w/wunderjt/Green_Social_Designs_Japan_TALK_19_PLUS.pdf

- Edited the publication

CONFERENCE WEBSITE: <http://www.iieng.org/2014/06/01/45>




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2nd International Conference on Emerging Trends in Engineering and Technology (ICETET'2014) May 30-31, 2014 London (United Kingdom)

[Click here to download the Call for Papers/leaflet for this conference](#)

New Submissions are OPEN and paper/abstract/poster can be submitted before May 12, 2014

GENERAL INFORMATION

2nd International Conference on Emerging Trends in Engineering and Technology (ICETET'2014) scheduled on May 30-31, 2014 at London (United Kingdom) aims to bring together leading academic scientists, researchers and scholars to exchange and share their experiences and research results about all aspects of Engineering and Technology, and discuss the practical challenges encountered and the solutions adopted.

ONLINE PAPER SUBMISSION

Full-length Papers, Short Papers, Posters and Abstracts are invited that address the themes and topics for the conference, including figures, tables and references of novel research material. Please [click here](#) to submit your full-length papers and posters for the conference.

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The International Refereed Conference Proceedings will be blind peer reviewed by two competent reviewers. The post conference proceedings will be submitted to be indexed in the Thomson Reuters, CiteSeerX, Google Books and Google Scholar for possible indexing. The conference proceedings book & CD and certificate of presentation will be distributed to the conference participants at the conference registration desk.

One Best Paper will be selected from each oral session. The Certificate for Best Papers will be awarded after end of each session.

REGISTRATION FEE

Category	Early Conference Registration Fees (on or Before Feb.	Late Conference Registration Fees (After Feb. 25, 2014 and	Late Conference Registration Fees (After March 20 and	Late Conference Registration Fees (After April 15, 2014)

Conference Venue



Holiday Inn London - Heathrow M4, Jct.4,

PDF of talk:

http://users.etown.edu/w/wunderjt/CrowdSourced Architecture and Environmental Design_PAPER_15_TALK_SUBMITTED_EDITED_Wunderlich.pdf

PowerPoint of talk:

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PDF of published paper:

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