



Selected Japanese Architecture and Urban Design

1. Historical Examples

- Case Studies soon to be linked from here

2. 2014 Paper and Talk in London including Japanese towns and homes designed by Elizabethtown College Students

- PAPER ([PDF](#), [WORD](#))
- TALK ([PDF](#), [PPT](#))

3. 2013 Paper and Talk in Japan, and personal pictures of Narita, Osaka, and Kyoto:

Japan, Hawaii, California 2013

40 Day Journey

- Osaka, Kyoto, and Narita, Japan
 - Osaka Sustainability Conference
 - [Key-note Speaker](#) (with my son Joseph at adjacent podium)
 - [Paper](#) co-authored with son Joseph
 - A few of the >100 slides are shown below
- Oahu, Hawaii
 - Honolulu Green Manufacturing Conference
 - See [Paper](#) and [Talk](#) (and a few selected slides below)
 - University of Hawaii Architectural meetings
- Newport Beach, California

Green Architecture and Environmental Design using Rapid-Prototyping Social-Networking Sandbox Tools followed by Professional Architectural Software

2013 Asian Conference on Sustainability, Energy and the Environment -- Osaka, Japan

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

Joseph John Wunderlich



Conference website:

http://iafor.org/acss_acsee2013.html



acss/acsee
spotlight speaker



Joseph Wunderlich
Elizabethtown College, USA



Dr. Joseph Thomas Wunderlich has designed two neurocomputers and part of an IBM supercomputer operating system. His Ph.D. (U.Del) and M.Eng. (Penn State) are in Electrical and Computer Engineering. He's conducted robotics research and taught a Ph.D. course at the University of Trento in Italy. He's taught 31 courses including eight new ones. He also has a BS in Architectural Engineering (U.Texas) and an almost-completed 2nd BS in Urban-Planning/Environmental-Design (UCSD). He has Project Director experience for ~\$70 Million USD of architectural projects in Texas, California, and Pennsylvania; experience as a San Diego County Environmental Planner and as a San Francisco Engineering Consultant (including EPA certifications). Recently he created the Elizabethtown College Sustainable Design Engineering program and the Architectural Studies Minor.

Mr. Joseph John Wunderlich is the designer of several hundred buildings throughout many virtual worlds in Minecraft, and has presented his work on several occasions in Dr. Wunderlich's courses.

Spotlight Speech: Green Architecture and Environmental Design Using Rapid-Prototyping Social-Networking Sandbox Tools, Followed by Professional Architectural Software

In 2012 the United Nations UN-Habitat's Sustainable Urban Development Network partnered with sandbox-game developers of the social-networking block-by-block building software Minecraft to upgrade 300 public spaces worldwide by 2016 by joining professional designers with local inhabitants in virtual-world simulations. This work is similar to the authors' research since early 2011 where a Minecraft server and concurrent database server were configured for peaceful architectural development by players worldwide, and in five college engineering and architectural courses. Students build green homes, plant gardens, and raise livestock in green villages, or on a virtual college campus within environments containing simulated weather, terrains, biomes, and AI-enhanced animals. Student avatars interact to design. Social-media scrolls across the screen so everybody can be heard. Student homes have active & passive solar; thermal mass, natural daylighting, mitigation of cold northern winds, and an overall architectural esthetic. Students create gardens, livestock areas, piazza's, markets, parks, and a wellness center with indoor pool and activity rooms. Credit is given for using the software's electrical, mechanical, and logic design features. Selected students are invited to develop professional architectural drawings. LEED (Leadership in Energy and Environmental Design) concepts are incorporated throughout. Future goals included implementing these methods in new architectural studio courses and at universities abroad; helping extend the UN/Minecraft concept to developed countries; and merging this research with the author's research in robotics & machine intelligence including interactive environmental maps communicating with real-time robots. Long-term goals include on-line virtual-reality classrooms and laboratories with real-time language translation and lifelike avatars.

Saturday Spotlight Session:

Saturday, June 8, 2013

12:30-13:15

Aoi Room 2F

AGENDA

- Inspiration & modeling intro

- United Nations



- Foam-board alternative



- Design in Social-net

- Small-scale crowdsourcing



- Ongoing Charette



- Professional tools

- Flamingo, Rhinoceros, Revit



- Future

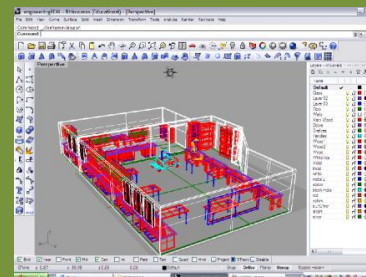


Photo taken by Joseph from other podium



Audience of approximately 200 people



iafor

Conference Banquet



Rapid Modeling (two hours in 2011)

by Joseph John Wunderlich



Wunderlich Residence



Foam-board Modeling (several weeks in 2000)

by J. Wunderlich, PhD



Wunderlich Residence

Rapid Modeling

(facade in one hour in 2013)

by Joseph John Wunderlich





(in 2011)

by Joseph John Wunderlich
and J. Wunderlich PhD



(in 2011)



Concurrent database server implemented to allow rollback of "Griefing"

Also implemented foul - language censorship, and disabled features such as fire-spread, placing lava, and TNT



(in 2011)



For a more powerful server, a “BUKKIT” server mod “CRAFTBUKKIT” used to allow:

1. PLAYER RANKING; Ours are: *Guest, Builder, Architect, Master, Admin, and Grandmaster* -- each having many accumulated commands. Bukkit plug-ins “ESSENTIALS,” “PERMISSIONS,” “CHAT,” and “GROUPMANAGER” were configured.
2. SQL DATABASE SERVER and plug-in “LOGBLOCK” for logging player activity to allow rolling-back of “griefing” (destruction or construction by un-invited or misbehaving players). The initial release of Tsojin Server was public. Unfortunately, due to griefing (including organized griefing teams), Tsojin was made private.
3. MULTI-WORLD plug-in to allow concurrent worlds (and teleportation & gateways between). Tsojin has six worlds.
4. Many other plug-ins (foul-language censorship, establishing monetary systems, allowing aircraft and vehicles to move, locking tool chests, sign-posting, etc.).

Built in only two hours
by 16 students !

(footprint created in advance)

EGR280 Engineering Research

FYS100 First Year Seminar: Scientific Modeling for Sport

Modeling in Social-net

2012 Hackman Apartments Team-build

[VIDEO](#)



Built in three hours by 40
students (~50% of interior complete)

(only footprint and section of facade created in advance)

EGR280 Engineering Research

PH275 Cognitive Science

FYS100 First Year Seminar: Scientific Modeling for Sport

EGR332 Computer Organization & Architecture

EGR343 Green Architectural Engineering course

Modeling in Social-net

2012 Masters Center Team-build



Six Tsojin Worlds

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

Design in Social-net

(in 2012)

by Joseph John Wunderlich
and J. Wunderlich PhD



Six Tsojin Worlds

Design in Social-net

(in 2012)

by Joseph John Wunderlich
and J. Wunderlich PhD



- Survival World
-
-
-

Default Minecraft mode is “survival” in this world, so all food & materials must be hunted or gathered (including mining); and tools and other materials are crafted

Initial hunting and gathering is with no tools

Animal behavior driven by Artificial Intelligence

- Flocking, herding
- Predators and prey
- They reproduce
- They can be tamed

Name	Input » Output	Name	Input » Output	Name	Input » Output
Workbench		Ore Blocks		Clay Block	
Furnace		Cloth Block		Brick Block	
Planks		TNT Block		Axes	
Sticks		Steps		Pickaxes	
Torches		Stairs		Shovels	
Chest		Snow Block		Swords	

Six Tsojin Worlds

-
-
- Digital Design World
-
-

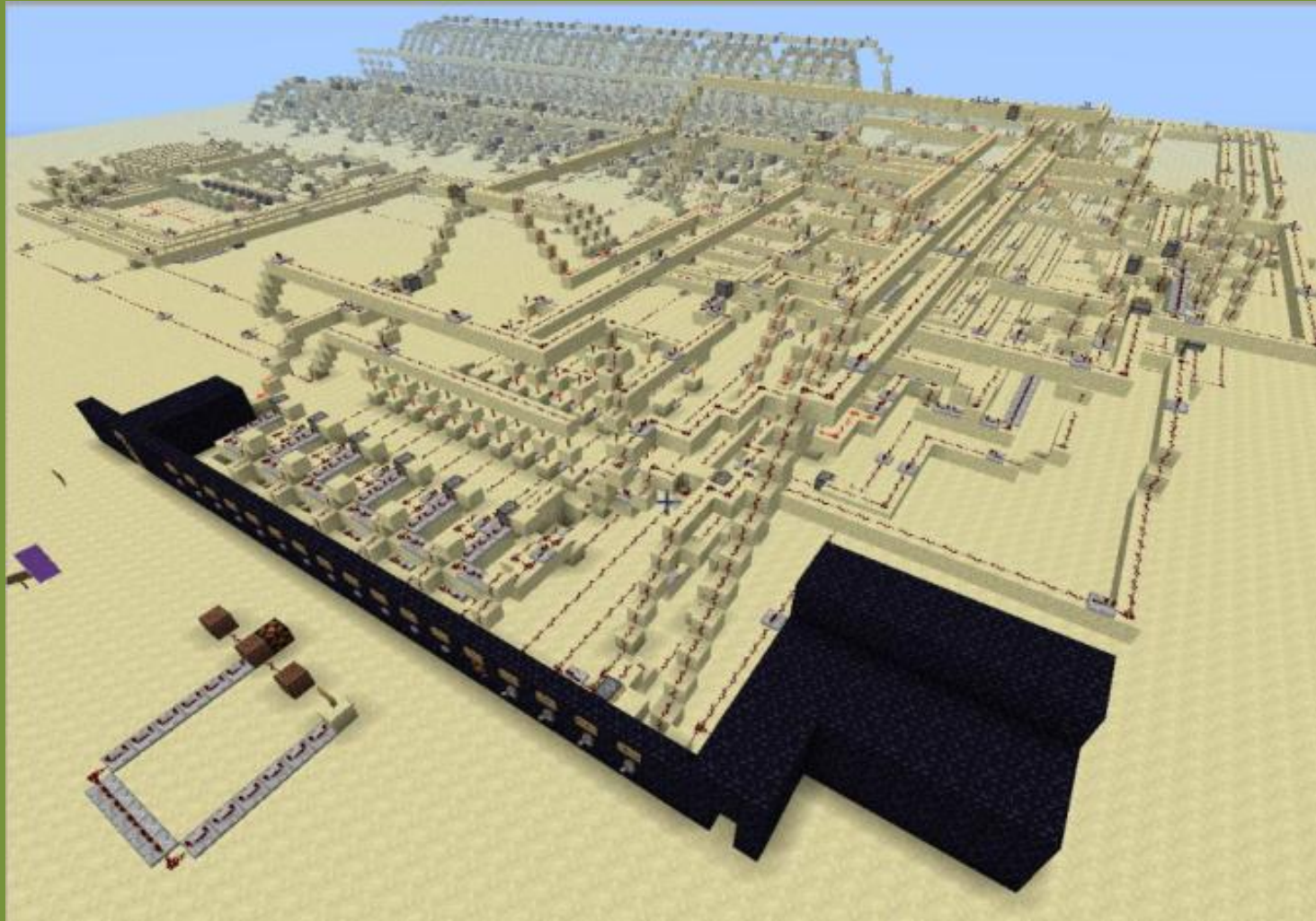
Design in Social-net

(in 2012)



Combination lock
by student Tom
Gorko in EGR332
Computer
Organization &
Architecture

(using built-in
Minecraft circuit-
design and logic
gates)



Six Tsojin Worlds

-
-
- FYSworld
-

Four
GREEN
towns

Design in Social-net

(in 2012)

by 16 College Freshmen



Six Tsojin Worlds

-
-
-
- FYSworld
-

Design in Social-net

(in 2012)

by 16 College Freshmen

Each GREEN town needed a dedicated lot for 24 visiting high school students to build a Wellness Center with Activity Room, lockers, and an indoor pool – all in one hour !

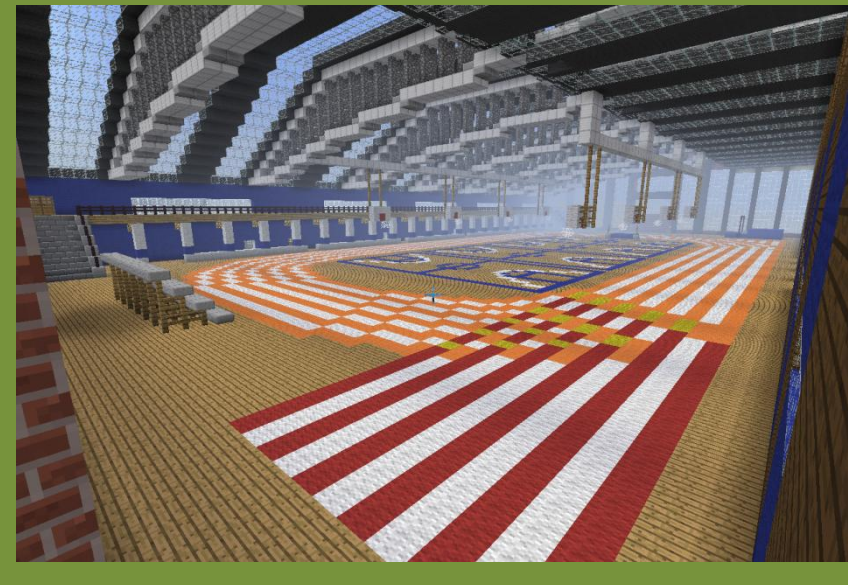


Minecraft *then* Revit

VIDEO

Professional Software
after Rapid Prototyping
semester projects
in 2013/14
by Ricky Sturz
EGR280 Engineering Research

Modeled entire campus in only
one semester using Minecraft,
including his proposed Field-
House/Wellness-Center
that he's now using Revit
software on



Key-note speaker
immediately
following ours.

Dean Emeritus of
Schools of
Architecture at
Texas A&M, Auburn,
North Carolina State
University, and The
University of Miami

John Regan
Texas A&M University, USA



Emeritus Professor John Regan had an extensive career in teaching and administration, most recently serving as professor and dean of the College of Architecture at Texas A&M University, also serving as the University Campus Planner and Head of the Campus Planning Research Laboratory. During his forty-four years in higher education, he was the dean of colleges of architecture in three major universities – Texas A&M from 1998 to 2008; the College of Architecture, Design and Construction at his alma mater, Auburn University, from 1995-98; the School of Design at North Carolina State University, from the 1989/90 year - 1995; he was the founding dean of the School of Architecture at the University of Miami from 1984-90.

A member of 18 national accreditation teams for professional programs, Regan served as national president of the Association of Collegiate Schools of Architecture. Regan's research focuses on innovation, design education, methodology, and campus planning.

Spotlight Speech: Innovation Through Syntactic Manipulation

While our Conference topic "Sustaining the Future" promises a diversity of ideas, the one factor that will drive sustainability in any of the social science fields in the future is what has been called the "currency of the 21st century – innovation".

A clear understanding of the processes that produce innovative ideas, concepts, processes and products is essential in a wide range of our fields, whether anthropology, politics, education, or social welfare. Innovation Through Syntactic Manipulation outlines a specific strategy to develop innovative results, first explaining the basic components of this process followed by case study documentations of how this process of innovation has been used by authors, designers, painters, composers and filmmakers. Attendees will learn how to use this "innovation process" to develop new strategies and/or products in any field.

The innovation process depends on three questions: 1) What role does "information" play in how we understand things? 2) How is the focus subject organized? 3) How can we make innovation happen? By utilizing an essential human characteristic - the desire and ability to "make sense" of any situation encountered – the process combines seemingly opposite characteristics into a single idea, guaranteeing innovative results.

Future innovation is based on successful past innovations. Case studies document how James Joyce, Richard Wagner, Picasso, Duchamp, and Magritte used the Syntactic Manipulation process. This process incorporates the linguistic theories of Charles Sanders Peirce and supports the improvement of social sciences advocated by Bent Flyvbjerg as outlined in Social Science: Applied Phronesis.



acss/acsee
spotlight speaker



Saturday Spotlight Session:

Saturday, June 8, 2013

13:15-14:00

Aol Room 2F

One other selected talk that included traditional Japanese house design



Japanese Town Design

(“URBAN PLANNING”)

Japanese Town Design

PATHS

and

EDGES



おてつき運動期間
「念佛をお罰えし、
法座さまのみ教え
をくらしの中に生
かしましょう」
「念佛の信心を人か
ら人におてつきし
同信の輪をひろげ
ましょう」
浄土の信仰を志め、
人々の知育と社会
の浄化につとめま
しょう

四脚門

これより先は
関係者以外
ご遠慮ください
Staff only





止まれ



和歌山古門

禁止



御安衛士屯所跡
この石碑は、寛政11年(1799)に建立された。この地は、徳川幕府の御安衛士が屯所を築いたと伝わる。石碑の表面には、御安衛士の歴史やこの地の重要性が刻まれている。また、石碑の周囲には、御安衛士の遺物や資料が展示されている。

御安衛士屯所跡

ツバキ
寛政11年(1799)建立





園徳院
掌美術館
三面大黒天

高台寺
拝観入口
Entrance
入口















浄土宗宗務庁



浄土宗宗務庁



















昭和二年五月

明德不動





















































エスカレーター
Escalator

防犯カメラ
作動中

テロ
ご理解・

- ・監視カメラに
- っています
- ・不審者・不審
- 直ぐに係員・
- 下さい。
- ・持ち主不明の
- 員・乗務員が
- ・ごみ箱は、透
- 改札付近に集



南漣
同胞們如親友人們及
未來正很滋養的食
人們和 這座的名位朋友
們大家心！心在我們這
來了 我們目前通曉家登
動免 雖然 這周年的大
整日子 在 這 個 月 月 日
家 少 少 的 心 意 並 重
台 感 謝！ 家 們 們 們 們
免 免 職 之 辭 之 辭 之 辭
是 能 夠 滿 意 之 辭 之 辭
以 右 內 容 之 辭 之 辭
八 氏 之 辭 之 辭
此 項 展 覽 會 之 辭 之 辭
此 項 展 覽 會 之 辭 之 辭

一燈照閣
萬燈照國

ひととき
森の生きのび



此項展覽會
之辭之辭









Japanese Town Design

OPEN SPACES,

PLAZA's, and

DISTRICTS





御守・御札受場

西翼殿









高台寺山国有林



ここは、近畿中国森林管理局の管理する「高台寺山国有林」です。高台寺山国有林は、三条通と五条通の間に位置しており、面積は約75haです。高台寺山国有林の山麓には、「世界文化遺産」に登録された清浄水寺をはじめとして、歴史的・文化的に重要な社寺が多く所在しています。このため、高台寺山国有林内には、万一、山火が発生した場合の延焼防止のため、防火線や防火管理道、防火貯水槽などを設置しています。

入山される皆様は、山火防止のため、タバコの投げ捨て、焚き火などは絶対に行わないよう、お願いします。



近畿中国森林管理局
京都大阪森林管理事務所

お知らせ

～国有林からのお願い～

1. 国有林内では、動物の保護にご協力ください。
2. 樹木を保護し、伐採や伐倒しは禁止です。樹木を伐採し、伐倒しは禁止です。
3. 国有林内では、薪の採取、土の採取は禁止されています。
4. 国有林内では、薪の採取、土の採取は禁止されています。
5. 国有林内では、薪の採取、土の採取は禁止されています。
6. 国有林内では、薪の採取、土の採取は禁止されています。
7. 国有林内では、薪の採取、土の採取は禁止されています。
8. 国有林内では、薪の採取、土の採取は禁止されています。

















株水建

この場所に放置されている自転車
ミニバイクは随時に撤去・移動します
大阪市 大宮警察署

ハ
禁

名城大学附属高等学校





勝古駅

列車種別	行先	発車時刻	備考
特急	勝田	13:19	13
特急	高崎	13:30	14
特急	勝田	13:36	14
特急	高崎	13:49	13

※時刻は変更される場合があります。必ず時刻表を確認してください。

勝古

案内図

- ← 特急列車発着場
- ← 普通列車発着場
- ← 特急列車待合室
- 待合室
- 小売店
- 売店
- 案内所
- 駅舎







京都府立大学
京都府立大学
京都府立大学

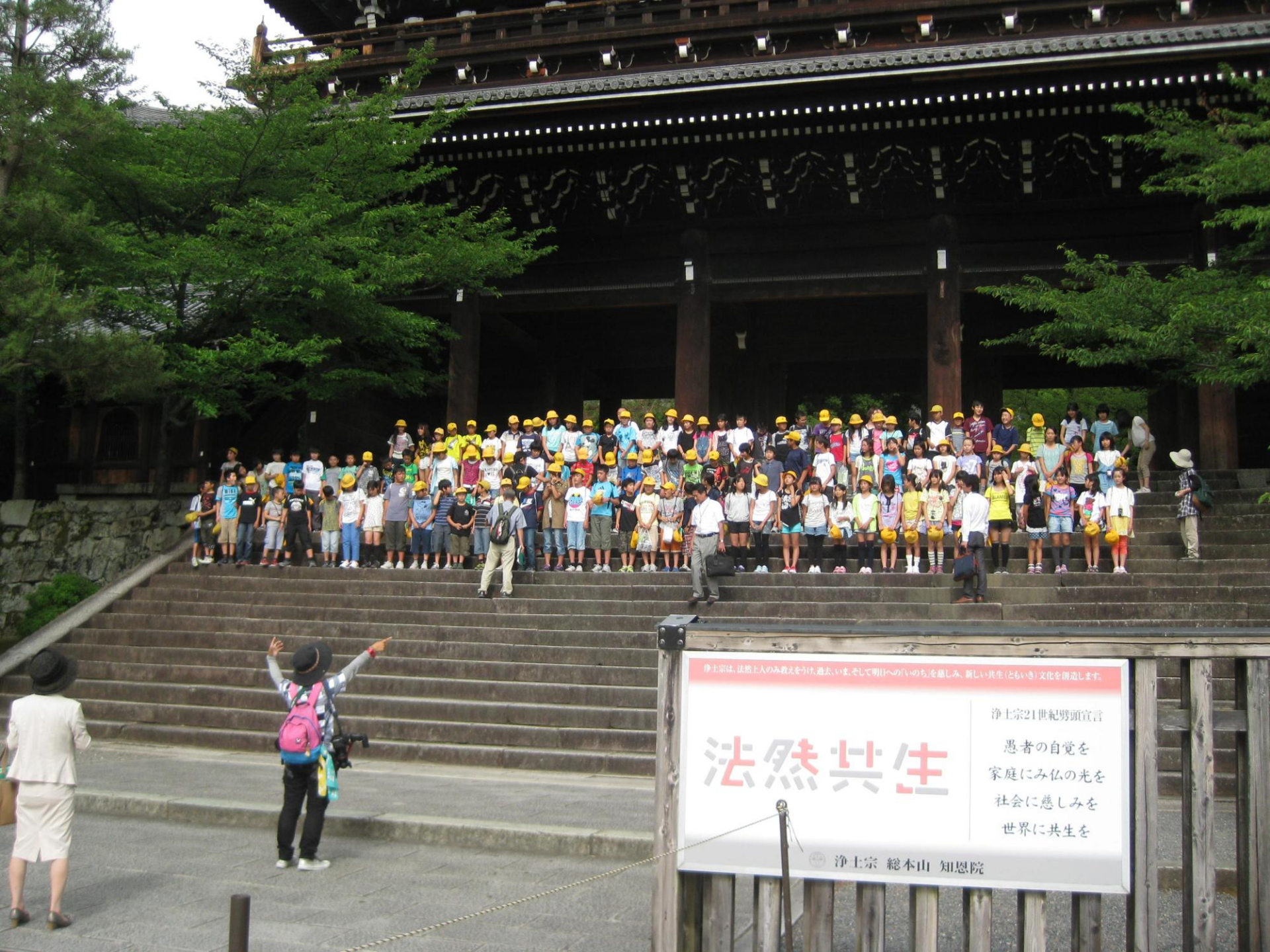
資料室
北園本館2F
7:00-17:00(月曜)
資料室(1F)
9:00-17:00(月曜)



駐車禁止
NO PARKING

駐車禁止
NO PARKING

駐車禁止
NO PARKING



浄土宗は、法然上人のみ教えをうけ、過去、いま、そして明日への「いのち」を感しみ、新しい共生(ともいき)文化を創造します。

法然共生

浄土宗21世紀劈頭宣言
愚者の自覚を
家庭にみ仏の光を
社会に感しみを
世界に共生を

浄土宗 総本山 知恩院

お猿を見る時の注意点

1. お猿の目を見つめない!!!

Don't stare at the monkeys
in the eye.

※お猿に対して威かくをしている意味になります。



2. お猿をさわらない!!!

Don't touch the monkeys.

※野生のお猿ですので、いやがって怒ることがあります。



3. お猿に食べ物を 見せない与えない!!!

Don't feed them outside.

※人に飛びつくクセが付き、マナーの悪いお猿に

なってしまいます。



以上3つの注意点を必ず守り

楽しくお猿を観察しよう!!



金網に顔を近づけないでください







祇園 かにかくに

ピアノ 原祥介

小倉のピアノの先生 ジア

紅おろし 祇園屋

祇園 松乃

真 壽子

南 宇野

横田 画廊

馬場 弘美

五條 長兵衛

祇園 喜泉

祇園 水月

ハイネ ス 祇園

長山 ジュネス

ト 口

橙 山村文男

茶屋 こゆき

松本 弥寿子

柳田 拓也

山田 山田

田中 望美香

ココロ 龍

山田 山田

山田 山田

山田 山田

山田 山田

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AMERICAN



コ-ヒー-ル-ウス
★
アメリカン



モーニングサービス
11:00AM - 12:00AM
12:00AM - 1:00AM
1:00AM - 2:00AM
2:00AM - 3:00AM



Japanese Architecture









華頂山





古札納所
ふるさつなごころ

国指定名所
神苑入口



国指定名勝
神苑入口









大本堂

飛の滝







大日堂















管理事務所

9:00 10:00
11:00 12:00
13:00 14:00
15:00 15:30

牛舎

アイリソフ



大日堂
青蓮院明





入信院













神代寺

山田

愛染明王

日本橋
神代寺























バイタルリアクト



Japanese Architecture

DETAILS



















TOSHIBA

SCS-T260



前

ノズル
位置

後

水 勢

温度調節

節電

ノズル
掃除

低

高

温水

便座



トイレットペーパーの使い切りにご協力ください。
Please cooperate in using up of toilet paper.

ECO-TEC KYOTO



















3,480

2,980

8,980

8,980

18,980

この商品は
ご自宅までお届けいたします
※送料は別途お見積りいたします
※詳しくは店頭までお問い合わせください

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木製ラティス付花台 2

1290 5

ラティス付花台
ラティス付花台
ラティス付花台

0248
1290





カーチンストーン
298

798

798

844

844

844



















京都華頂大学

KYOTO KACHO UNIVERSITY

華頂短期大学

KACHO COLLEGE

華頂短期大学附属幼稚園

KACHO KINDERGARTEN

川に空カン・ゴミ等すてないで下さい。



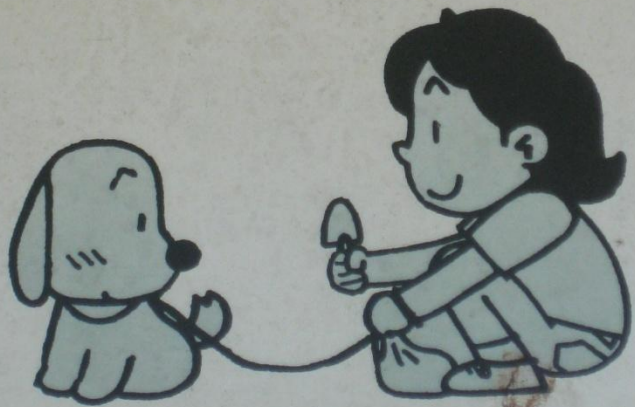
子どもたちに
美しい
川をのこそう

白美会 (祇園白川)

- 京都河川美化団体連合会
- 京都府京都土木事務所

みんなの町を美しく

フンの後始末は
飼い主の責任です。



東山保健所・家庭動物相談所



山の緑を
火災から守ろう



京都市消防局 紫明ライオンズクラブ

ワールドミュージック

MUSIC CD サウンドトラック

MUSIC CD アニメCD

MUSIC CD アニメCD

CD

ANDREA BOCELLI
JOSE CARRENS
RUSSELL WATSON
オムニバス
TAYLOR SWIFT
HOLLYWOOD
JOJO CHAMBERS

book-off
ワールドミュージック

観終わった
DVD
お売り下さい

出張買取で
お売り下さい
TEL 0476-20-3191

出張買取で
お売り下さい
TEL 0476-20-3191

出張買取で
お売り下さい
TEL 0476-20-3191

聴きあきた
CD
お売り下さい

観きあきた
DVD
お売り下さい

観きあきた
DVD
お売り下さい

観きあきた
DVD
お売り下さい

観きあきた
DVD
お売り下さい

観きあきた
DVD
お売り下さい

観きあきた
DVD
お売り下さい



SELFISH

Wish The Most
Of Good Days

RE
LE
10



20% OFF

20%



No camera &
No food!
カメラ & 飲食
お断り!

地藏 - JIZO
The Jizo-bosatsu who relieves people
It is widely worshipped as the protector
of travelers. It has a gourd in the left hand
called shakujō in the right.
Jizo-bosatsu figures are
often seen along roadsides
with bibs around their necks

幸福 = Happiness
夢叶う Dreams Come True
運ぶ LUCK
元氣 Health



Hawaii

Conference website:

<http://www.isgma.org/>

2013 International Symposium on
Green Manufacturing and Applications
Honolulu, Hawaii

Green Robotics, Automation, and Machine Intelligence; a new Engineering Course in Sustainable Design

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

**2013 International Symposium on
Green Manufacturing and Applications
Honolulu, Hawaii**



*Part of engineering program in Sustainable Design at a US
Liberal Arts college in Pennsylvania*

*Program is mix of environmental
engineering and environmental design
including high-tech-green*



Introduction to mobile robots

Path-planning, obstacle avoidance, real-time sensor fusion, vision, laser range finders, ultrasonic sensors, GPS navigation, digital compass, motor types, wheel configurations

Elizabethtown
College Research
with J. Wundelich



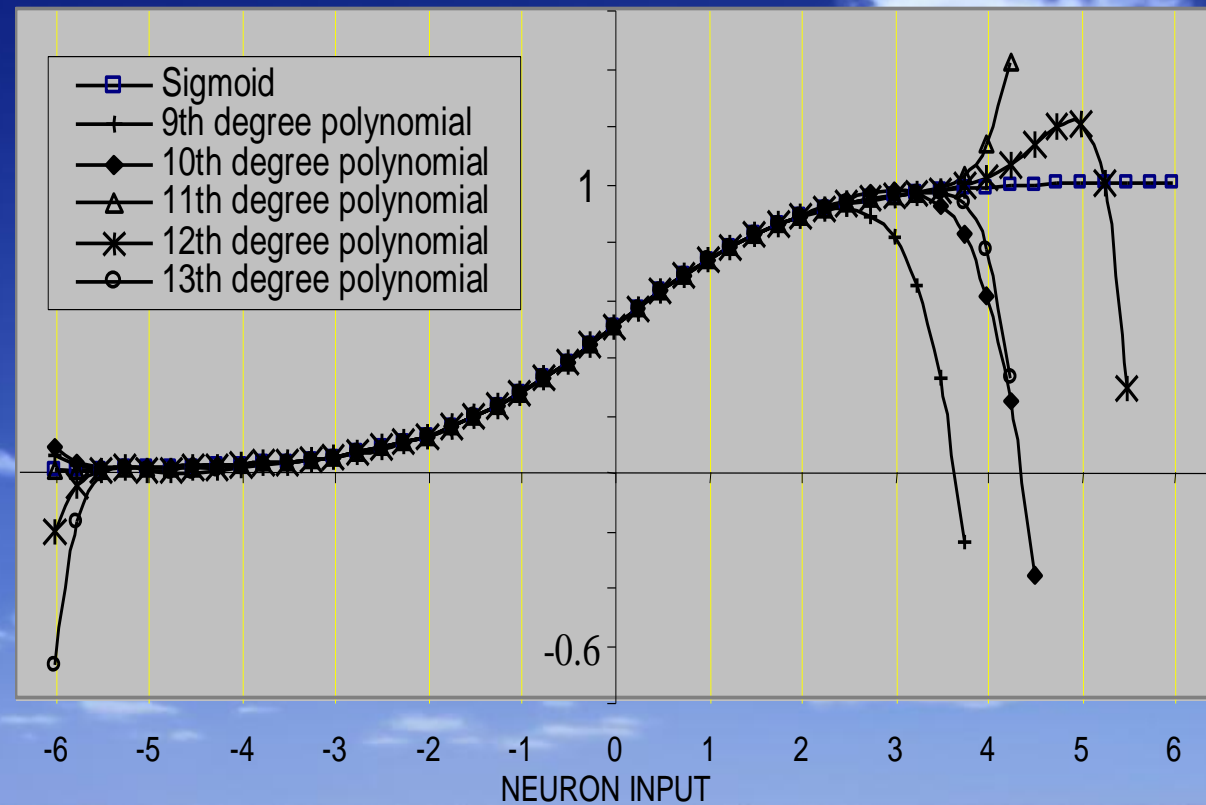
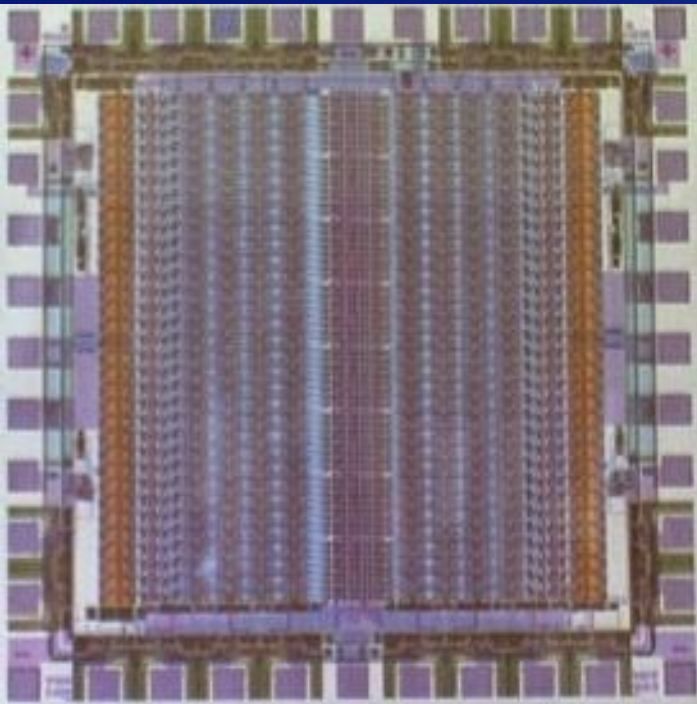
Introduction to robotic arms
Kinematic controls schemes
(position, velocity, acceleration)

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College Research
with J. Wundelich



“Bottom-up” *biological* brain models vs.

“Top-down” *psychological* models, Mathematical theory



Applications

Automated agriculture

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Applications

Automated agriculture

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Applications

Intelligent cars (including solar)

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with T. Estrada



Applications

Intelligent energy storage

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College Research

with alumnus

Dr. Dax Kepshire

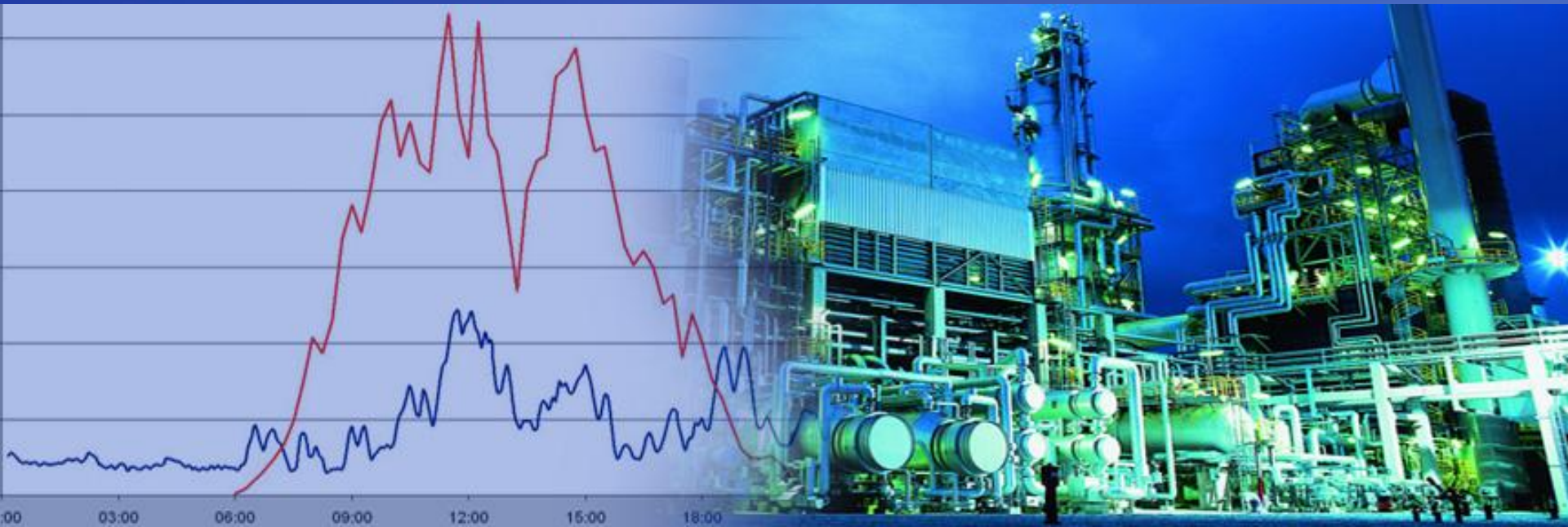


About Us

Applications

Energy load-shedding

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Dr. Dax Kepshire



Ethical Issues



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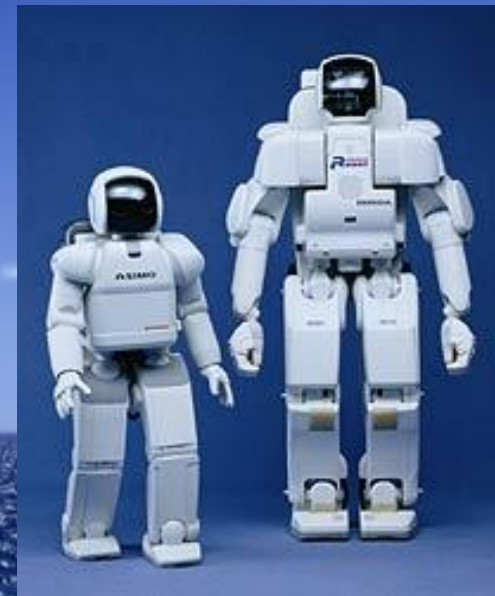
Replacing humans vs. aiding humans

Artificial humanoids

Workers, entertainers, companions

Designing autonomy (Safety of life and property)

Autonomous military drones



Elizabethtown College Robotics & Machine Intelligence Lab



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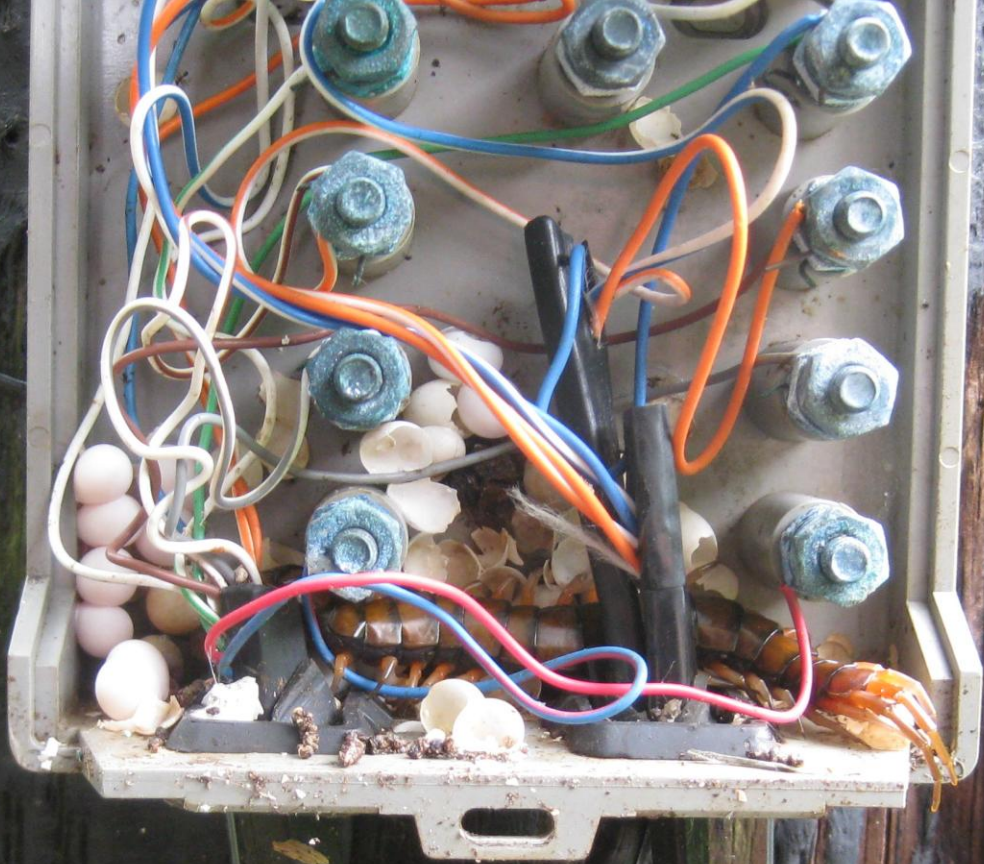






















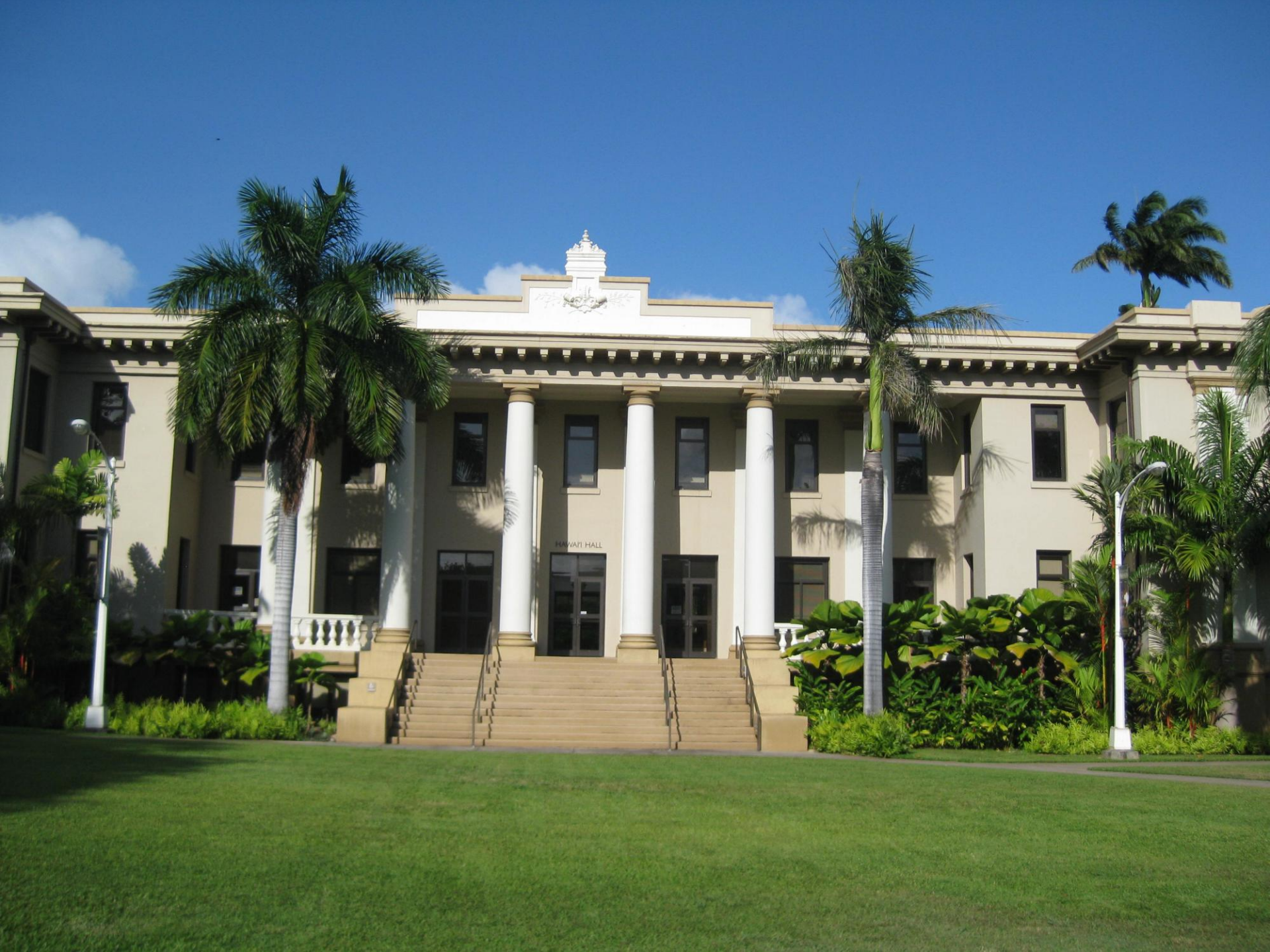






University of Hawaii

School of Architecture

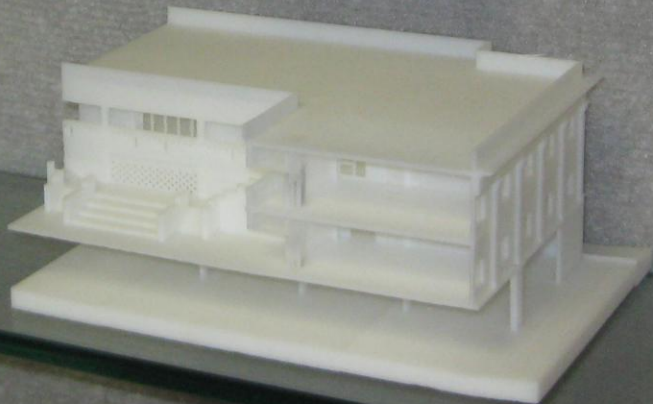
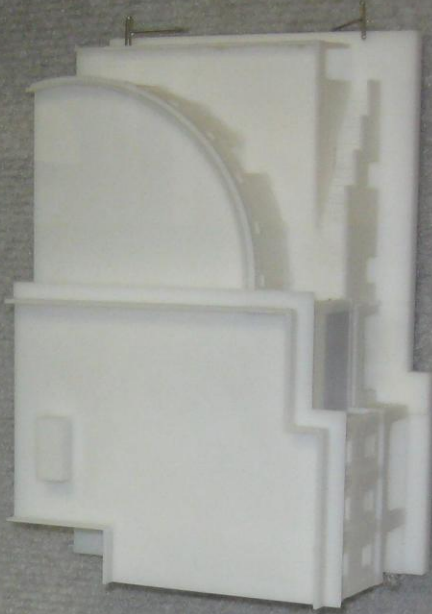


HAWAII HALL

















California Family

