[Education, Engineering, Business] & New Technologies: Successful Integration
(aka A King from Stanford and a scribe from Maryland: some engineering memoirs)
(download document draft update anytime! -> http://www.engineeringfundamentals.net/Successful-Integration.pdf)

www.PocketGoogle.com

What is it? A basic ideation/idea/demo/**beta implementation** to hands on illustrate various possible preliminary Ph.D. thesis topic (stated below) point(s)/nuances; basically derived from a pet project; mini search engine using a simple Perl script and some hundred cornerstone content html pages. In need of a new home/repurpose; the glue component responsible for one way to access the stuff. Plus the no-shorter-shortcut premium domain based ***handles***/anchors. Read more link: http://www.engineeringfundamentals.net/PocketGoogle.pdf

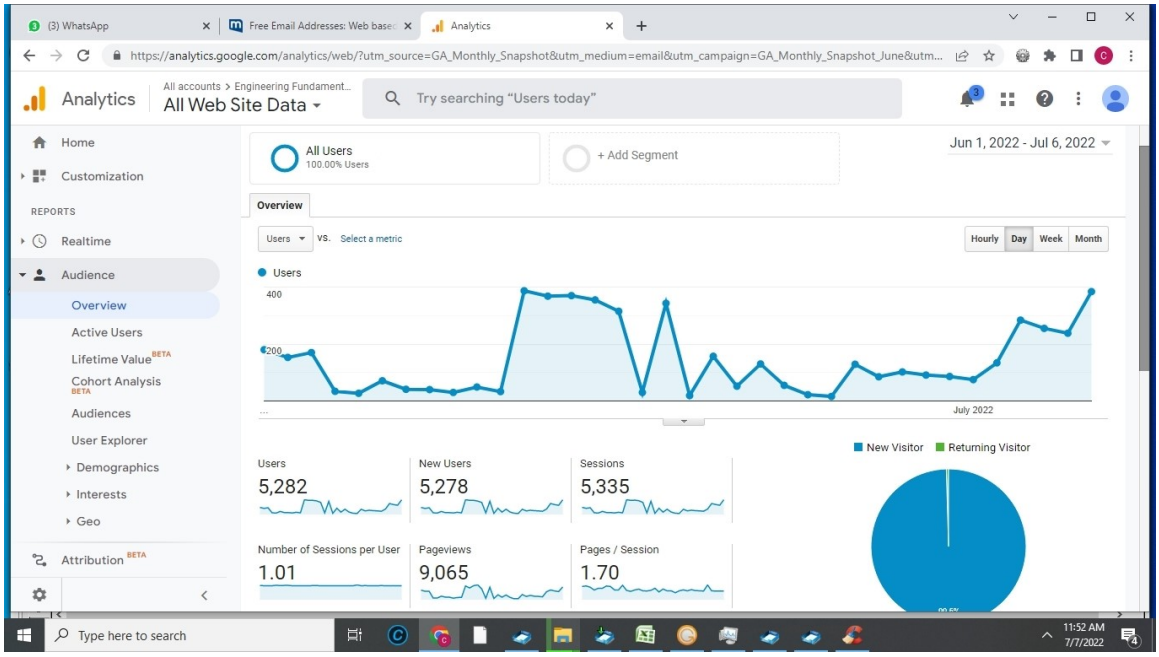


www.EngineeringFundamentals.com

What is it? Basically an overall grouping *denomination*/umbrella/flagship/***host*** for the whole themed miniwebsites. Content came out of about 20 years of email correspondence and 50+ years engineering practice. A proposed springboard for outreach of all sorts. At some time reached 5k visitors/month in June. Kind of the glue component responsible for grouping the numerous areas/fields – "Hey what is all about?" Read more link/ Pass-along Rough Project Statement: http://engineeringfundamentals.net/Engineering-Fundamentals-Redone.pdf



Engineering Fundamentals (Under Construction - Only Partially Functional)



College Vertical Perceived Needs

- Students are looking for jobs, internships
- Faculties are looking for grants, projects, projects, field data
- Universities are looking for students, partnerships, sponsorships
- Industries are looking for qualified workers
- Surge of online learning/ booming (Newsweek/Statista) & need to stand out

Explored Outreach/Test Audiences

Top industries/engineering firms: the likes of Dupont, Veolia, Stantec, Brown and Caldwell, Evapco, Brentwood.
http://www.engineeringfundamentals.net/Anno-2022-Helper.pdf

Early stage sample records (digital prospection as a vehicle; true success story; if it was good for DuPont ...)



http://www.engineeringfundamentals.net/SQL-result-phpMyAdmin-2.11.11.3.pdf

Top university "budding" interaction: UC Davis, University of Maryland, University of Maryland Global Campus.
University of Maryland College Park Mentor

http://www.engineeringfundamentals.net/PocketMartin/Peer-Alumni-Mentoring-Agreement-Fall-2021-signed.pdf

University of California, Davis - College of Engineering - ENG 003 Introduction to Engineering Design - Design Showcase Evaluator (Spring 2022) - (45 undergraduate engineering teams)

Pending/In-Progress: Verizon Innovative Learning JBP; similar T-Mobile (Dr. Keisha King)

www.GalopeApproach.com

What is it? The original backing rationale/manifesto for proposing deployment of **G**ive **A**way **LO**calized **P**ocket **E**ngines or Galope digital constructs for short (UC Davis Capstone)

Galope Approach: How to Achieve almost Zero Bounce, Boost Average Session Duration and Attain Higher Page per Session ratios … in a single stroke

By Martin Balestie

Abstract: decentralized searching, a flagship concept developed while completing Capstone/graduation requirements for University of California Davis SEO specialization pursuant to achieve almost zero bounce, increase average session duration/interaction/engagement and attain higher page per session ratios in a single stroke.

Keywords: Galope decentralized searching instances

GALOPE APPROACH (or Run for the Roses!)

Zero bounce. 6-12 minute average session duration. 23 pages per session views…

Sounds like a really nice value proposition!

The following approach may be a possible way to do it.

To begin with …

Galope stands for Give Away LOcalized Pocket Engines

The term means gallop in both Spanish and Portuguese. The canter and gallop are (thanks Wikipedia!) variations on the fastest gait that can be performed by a horse or other equine. The canter is a controlled, three-beat gait, while the gallop is a faster, four-beat variation of the same gait. It is a natural gait possessed by all horses, faster than most horses' trot, or ambling gaits.



Go Galope, Go!

How would this work (core field/domain content/acquisition/update)…

Mike (Boyd, Veolia): Mike we will we working on content for the annual rewrite of www. – is it OK if we can somehow stage some field trip at a nearby wwtp?

Tina/Kody (Arrowood, Ballard; DuPont): Tina/Kody we will we working on content for the annual rewrite of www. – is it OK if we can somehow stage some field trip at a nearby …/other?

Clint (McCorkle, Brentwood Industries/SVP): Clint we will we working on content for the annual rewrite of www. – is it OK if we can somehow stage some field trip at nearby/other/company facilities/etc ?

Existing seed/starter JCY+ content: cornerstone inventory (20 and epistolary exchange)

How would this work (as regards the actual site; CS/IT "labor for free")…

Stage classical annual specialty competition, or every 4 months. Teams can pick/try technology, language, framework, device audience, media (pod, tube). Evaluation is relatively straight forward: popular vote, evaluator teams, whatever Nth iteration succeeds/supersedes or keep existing design
End result: a premier online publication in the field bridging the classic "academia – practicing professional" schism. Advertising/sponsoring opportunities?

PennStateRedone, e.g. CE472 (sample course booster of truly global/online offering)

> What is it? A sample possible **course rework illustration** for top online/# 1 environmental engineering GLOBAL webspace niche). Actually a preInternet Penn State course/series thread/ideation snippet I did ages ago and that could be wholly repurposed and much more - to my taste no bigger env eng hammer in the world than Jim Young, my remote mentor for two decades and much more !!
> http://engineeringfundamentals.net/PocketMartin/Penn-State-Redone.pdf
>
> It would mean a whole new approach to classic courseware and help set apart program - no way to replicate this stunt anywhere in the world/e-world!

Adding new/Revamping/Repurposing chapters …(Aeternally Sustainable)

Reasoning/Catalyst/: Hey we've got a bunch of kids that could use some internships in say radial deionization, or synthetic methanation -> let's launch the "pamphlet"and corral some possible players in the field … no bones broken, no harm in charm!

Sample/partial contributors/credit

Partial account of contributors/credits/other – may be dated or some domains dropped
http://www.engineeringfundamentals.com/AnnotatedMiniwebsiteSummaryPartial.pdf

Why?

Perhaps it's time to say Thanks! (and give back!). Because of circumstances that can only be called some sort of convoluted career path, I earned credit & training from numerous schools: UofMichigan, UofLouisville, SouthernIllinoisCarbondale, UofIllinoisUrbana, DePauw, UofMaryland, Penn State, UC Davis, UofWisconsinMadison, Dartmouth, Duke, Missouri Columbia. (and probably counting!!!)

Anticipated benefits/associated valued added

- 1. Help weld for life school-industry rapport (versus the chronic schism)
- 2. Facilitate/easen student-real-life-employer interaction; jobs; internships
- 3. Help corporations early identify talent
- 4. Provide endless commensurate assignments for student body plus legacy for posterity
- 5. Bank on each individual department resources and pool them on a university-wide program; reinforce common goals mission
- 6. Probably help attract and showcase top faculty & kids
- 7. Foster single [industry academy other] library approach updated on a continuing basis
- 8. Can provide springboard for all sorts of related publications, links, downloads
- 9. May provide access to frequently unpublished insider only manuscripts & tips
- 10. Field icons can easily head themed section, either as chairs or guests
- 11. Global and digital go hand in hand
- 12. Online education is booming (re first Newsweek ranking ever)
- 13 Perhaps add some clout to some strategic initiative moves/drives; partnerships/requests for corporate/government/other sponsorships
- 14 Tech./content testbeds of any/every kind – no bones broken; may rival business publications

Ph.D. plan and possible associated items/roadmaps/Interim Executive Summary

Looking back (e.g. Appendix PDFs and Published Works IX below) seems to me there's a good *first-hand research* starter inventory/seed even since valuable/evergreen preInternet times (plus all the online/offline stuff that came afterwards) for the Ph.D. way, t*hrice tested:* time, actual field and distance!

Music is meant to be performed/heard not read same sometimes with messages or cases! Usually reading places undue burden on the reader and ritin at times its not perfect!

I'm pasting link for this work-in-progress document draft as possible thesis/broad approach such a rara avis, one of a kind, sui generis it's such a pain to fit "fill the forms" but then that's the beauty 100% out of the box! Will welcome any and every possible type of recommendation/critique. Feel free to pass along for review/further queries/additional info/possible paths.

http://engineeringfundamentals.net/a-King-from-Stanford-and-a-scribe-from-Maryland-plus-Verizon.pdf

Basically, the central theme of the proposal focuses on at least three (3) aspects of enormous relevance/importance.

- the successful partial integration/resolution of classic "academia - practicing professionals" turfs divide (helps students find jobs & openings/internships & vice versa);
- successful integration/reinforcement of team work/common goals "JBPs" versus the classic silos/partitioning of both knowledge and talent, again successful integration versus "digital transformation" corporate clich頎
- *implement a systematic/year round paced university springboard for all types of outreaches*, improving employability, rapport and bridging the student-workplace distance, much better than the "one shot at" Penn State example examined in the draft

Every time you purchase a [digital] product you're handing over the experiential learning to someone else (plus your nickel!)

So keep the nickels, keep the assignments and keep the opportunities to make mistakes and learn. Keep a balance between grow your own and outsourcing that really makes sense (would believe big publisher turf). Students may beat professionals and rehearse possible career paths (CS/IT, creating writing, UI, graphic arts, image processing, evaluation, there's no end). Subsequent iterations will raise the bar/build on top Ad Aeternum!

This possible thesis approach would be recommending the coordinated conjunction of three parties:

- - one or more participating higher education institutions (with some tweaks similar educational approaches could even be articulated including also say Science, Arts at elementary and secondary district levels - see Appendix at the end)
- - a slight support from one or more technology companies, mainly telecommunications, e.g. Verizon, T-Mobile, ATT as mentioned in the pdf
- - a "starter" "ideology" or rationale/small team to work together with the two previous partners;

What perhaps becomes apparent from the beginning would be which dept. would the best bailiwick/host for the project, be it College of Engineering, College of Education, College of Business and even College of CS/IT or Online Learning or Continuing/Distance Ed and/or Professional Development ! (or maybe a special initiative stunt, strategic partnerships & engagement; in any case "A rose by any other name would smell as sweet" and the end goal is across-the-board/common goals convergence. As by design the core initiative/driving force is outreach it could launch from any of them!)

Will welcome any and every possible type of question. Content of all sorts keeps swelling by the minute; UC Davis folks sent me this tons of things ahead!!
https://edition.cnn.com/2023/09/05/opinions/artificial-intelligence-jobs-labor-market/index.html

Computers most frequently are ahead of the law but NOT above the law; computers are as well most frequently ahead of education but NOT above ed. Can be innumerably extended... All these things are giving thoroughbred/ "heartland"/dependable/ classical/"old school" CS/IT a bad name - friendly push backs are definitely needed! Global and digital go hand in hand!

No matter what everything's related to everything!
http://engineeringfundamentals.net/1000Ace/First-Perfect-Grade.jpg
Did it again!
http://engineeringfundamentals.net/1000Ace/martin-balestie-first-perfect-grade-twice.pdf

APPENDIX I

Who wrote it (this draft)?

www.MartinBalestie.com (can also be reached via www.PocketMartin.com - computers NEVER fail to fail!)
https://www.linkedin.com/in/martin-balestie/
https://www.facebook.com/martin.balestie/

Education field specific items in a nutshell
I feel I can easily play/customize in any of a given roles be it curriculum design, teaching, remote learning
University of Maryland College Park Mentor
http://www.engineeringfundamentals.net/PocketMartin/Peer-Alumni-Mentoring-Agreement-Fall-2021-signed.pdf

University of California, Davis - College of Engineering - ENG 003 Introduction to Engineering Design - Design Showcase Evaluator (Spring 2022) - (45 undergraduate engineering teams) - also last week session (c. 140 student projects)
http://engineeringfundamentals.net/Evaluator%20Assignments%20%26%20Team%20Info%20%28Sp22%29.xls

Coursera Certified Mentor
a pretty decent minor in education including a good number of 4xx and even some 5xx courses PLUS

- former AP computers instructor American School Buenos Aires Argentina
- former AP computers instructor American School Montevideo Uruguay
- former computer coordinator/teacher Northlands Olivos Argentina
- former computer/information systems workshop creator/presenter Crandon Junior College Uruguay
- former trumpet instructor Crandon School of Music

Sample Curriculum Development (background plus delivered items, from archives)
http://www.engineeringfundamentals.net/PocketMartin/AmericanSchool.jpg
http://www.engineeringfundamentals.net/AmericanSchoolCurriculumDevelopmentSample.pdf

No problem boots on the ground, remote, starter or high travel/week-end assignment/missions. Relocation also possible

I have started to regroup IT/CS oriented items in a kind of helper file
http://engineeringfundamentals.net/A-print.pdf

Other CV/data

http://www.engineeringfundamentals.net/1000Ace/profile-draft-13.pdf
http://www.engineeringfundamentals.net/1000Ace/profile-draft-13.doc

Possible contact data

Feel free to shoot me back an email any time to answers@engineeringfundamentals.com and/or balestie@umich.edu and I will be sure glad to expand/follow through maybe even by phone (on/off: 1 917 720 3624).

APPENDIX II

A Ph.D. path (excerpt from email)

From: James Young <jcyenv@msn.com>
Sent: Monday, August 8, 2022 12:35 PM
To: answers engineeringfundamentals.com <answers@engineeringfundamentals.com>
Subject: Re: possible next steps ... (hope email gets home ... battling Outlook365 and probably winning but there's no small enemy...)

Martin:

Getting a Ph.D. degree is rewarding but takes a lot of planning for someone as you that has an established business that needs to be suspended or closed. You will need to find a professor who has a project area of his/her and your interest. If you need funding, that professor will need to have a funded project that will cover your time and expenses. You need to make sure that the university will accept your online courses. This has been a problem with some universities in the past, but I have not dealt with this question recently. The basic objective of a Ph.D. program is to apply fundamental concepts to prove a hypothesis or to develop a new area of study. I'm sure you won't have any problems meeting these objectives if you and the professor agree. I'm not sure that website development would be a good Ph.D. project topic, but it could be used to provide income to support a program as long as the time involved did not interfere with the Ph.D. dissertation work.

I expect that you won't have difficulty finding the right university and professor to work with. Let me know if you need a reference to application.

Best wishes for your success.

Jim Young

RSA, LLC

479-927-9396

www.respirometer-sys.com

APPENDIX III

Typical internal communication (excerpt from email)

From: "Ballard, Kody" <kody.ballard@dupont.com>
To: Martin Balestie <answers@engineeringfundamentals.com>
Subject: RE: FW: [EXTERNAL] GRUPO ALBANESI S.A.
Thread-Topic: FW: [EXTERNAL] GRUPO ALBANESI S.A.
Date: Thu, 25 Feb 2021 16:06:12 +0000
Accept-Language: en-US
X-MS-Has-Attach: yes
X-Antivirus: Avast (VPS 210225-0, 02/25/2021), Inbound message
X-Antivirus-Status: Clean

Hi Martin,

Apologies for the delayed follow up, but yes I agree this sounds like a plan. I will look to loop you in on any continued communication with clients to give you a bit better insight into the details shared of the CCRO solutions being considered.

And also, yes I will let you know if/when there are any other connections that may be lagging behind that could benefit from a bit of prodding to get reengaged.

Thanks again for the continued support, successes should start coming soon!

Regards,
Kody

Kody Ballard
Regional Sales Manager
Water Solutions
Safety & Construction
DowDuPont Specialty Products (DuPont) Division

_____

email: kody.ballard@dupont.com

Cell Phone Number: +1-802-999-0667

www.dupont.com/water

APPENDIX IV

U of Maryland College Park (excerpt from email)

IRIBE INITIATIVE FOR INCLUSION & DIVERSITY IN COMPUTING

Additional Expectations for 1:1 Mentoring

- Attend the Peer & Alumni Mentoring Kick-Off and Wrap up Celebration.
- Regularly communicate with your mentor/mentee.
- Respect each other and review the boundaries listed below.

Boundaries

Both:

- Talk about your responsibilities, what you can and can't do.
- Agree on the practical details of the relationship: frequency, time, agenda, and format of meetings (in person, email, zoom, or phone).
- Beyond agreeing to confidentiality, discuss what confidentiality actually means to each of you in various scenarios.
- Build trust and develop understanding.

Mentors:

- Determine what level of access your mentee has with you, and identify limits and boundaries.
- Establish parameters and timelines for expectations.

Mentees:

- Prioritize how you wish to best utilize your mentor's time and expertise.
- Know there are additional existing resources for you with regards to personal issues.

Mentoring is a process and not a destination. Enjoy the process and seek support from program staff when needed. If problems develop, please contact **Veronica Sanchez** at (vsanche8@umd.edu) immediately so action can be taken.

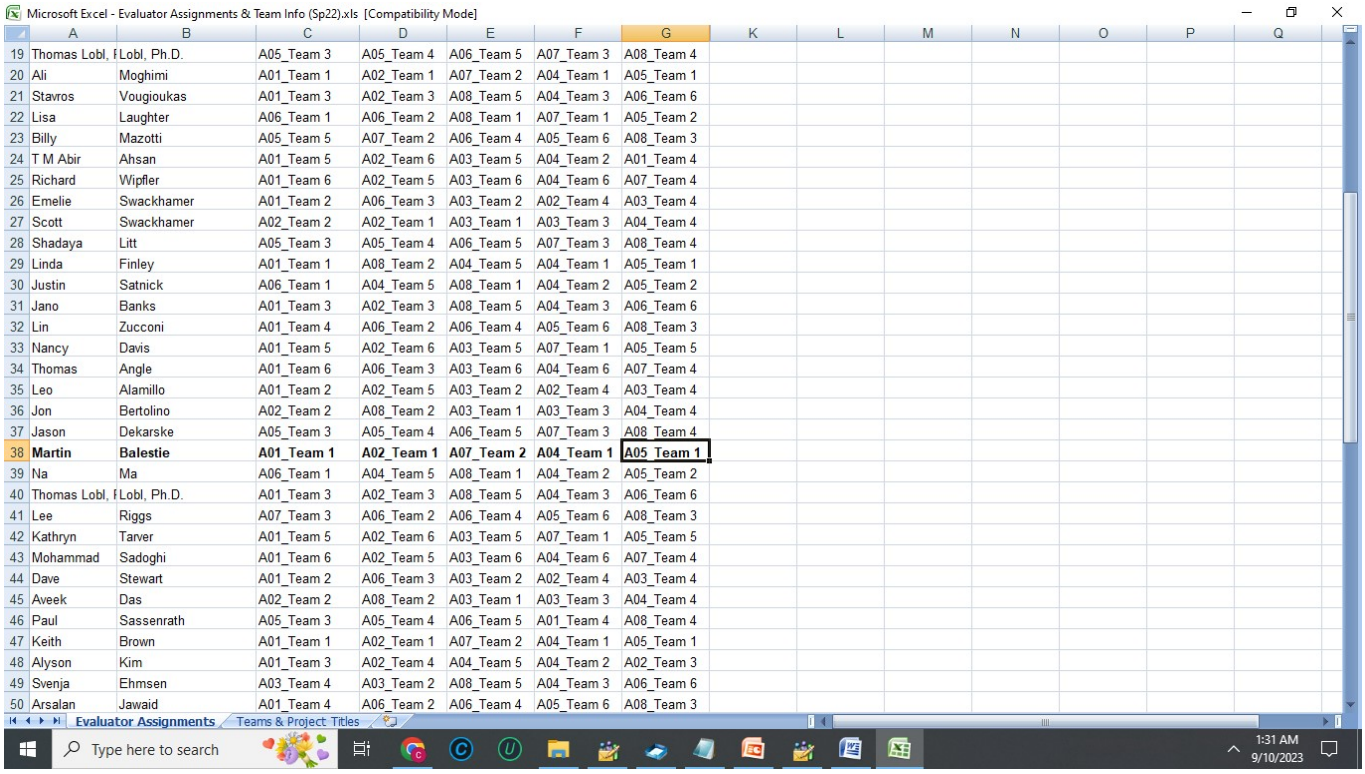
I, Martin Balestie, agree to be a part of the Iribe Initiative for Inclusion and Diversity in Computing Peer & Alumni Mentoring program for Fall 2021.

Martin Balestie
Martin Balestie (Sep 15, 2021 07:04 ADT)
Participant Signature

Sep 15, 2021
Date

Questions, concerns, or issues can be sent to the Iribe Initiative for Inclusion and Diversity in Computing (inclusion@cs.umd.edu).

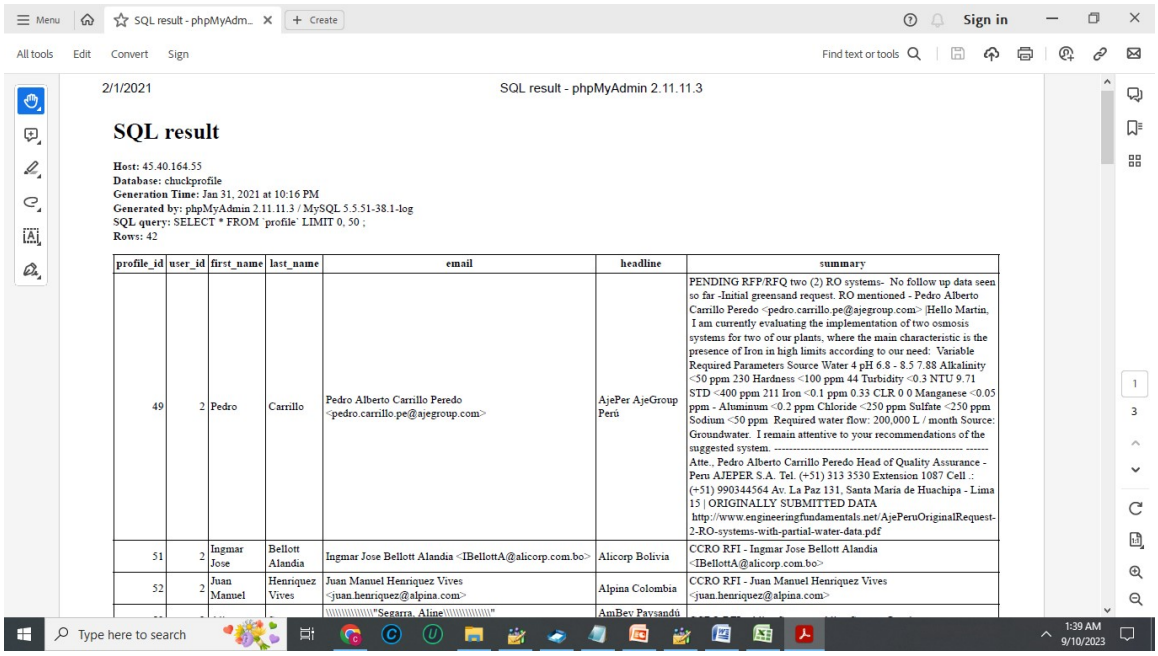
APPENDIX V: UC Davis



	A	B	C	D	E	F	G
19	Thomas Lobl, f	Lobl, Ph.D.	A05_Team 3	A05_Team 4	A06_Team 5	A07_Team 3	A08_Team 4
20	Ali	Moghimi	A01_Team 1	A02_Team 1	A07_Team 2	A04_Team 1	A05_Team 1
21	Stavros	Vougioukas	A01_Team 3	A02_Team 3	A08_Team 5	A04_Team 3	A06_Team 6
22	Lisa	Laughter	A06_Team 1	A06_Team 2	A08_Team 1	A07_Team 1	A05_Team 2
23	Billy	Mazotti	A05_Team 5	A07_Team 2	A06_Team 4	A05_Team 6	A08_Team 3
24	T M Abir	Ahsan	A01_Team 5	A02_Team 6	A03_Team 5	A04_Team 2	A01_Team 4
25	Richard	Wipfler	A01_Team 6	A02_Team 5	A03_Team 6	A04_Team 6	A07_Team 4
26	Emelie	Swackhamer	A01_Team 2	A06_Team 3	A03_Team 2	A02_Team 4	A03_Team 4
27	Scott	Swackhamer	A02_Team 2	A02_Team 1	A03_Team 1	A03_Team 3	A04_Team 4
28	Shadaya	Litt	A05_Team 3	A05_Team 4	A06_Team 5	A07_Team 3	A08_Team 4
29	Linda	Finley	A01_Team 1	A08_Team 2	A04_Team 5	A04_Team 1	A05_Team 1
30	Justin	Satnick	A06_Team 1	A04_Team 5	A08_Team 1	A04_Team 2	A05_Team 2
31	Jano	Banks	A01_Team 3	A02_Team 3	A08_Team 5	A04_Team 3	A06_Team 6
32	Lin	Zucconi	A01_Team 4	A06_Team 2	A06_Team 4	A05_Team 6	A08_Team 3
33	Nancy	Davis	A01_Team 5	A02_Team 6	A03_Team 5	A07_Team 1	A05_Team 5
34	Thomas	Angle	A01_Team 6	A06_Team 3	A03_Team 6	A04_Team 6	A07_Team 4
35	Leo	Alamillo	A01_Team 2	A02_Team 5	A03_Team 2	A02_Team 4	A03_Team 4
36	Jon	Bertolino	A02_Team 2	A08_Team 2	A03_Team 1	A03_Team 3	A04_Team 4
37	Jason	Dekarske	A05_Team 3	A05_Team 4	A06_Team 5	A07_Team 3	A08_Team 4
38	**Martin**	**Balestie**	**A01_Team 1**	**A02_Team 1**	**A07_Team 2**	**A04_Team 1**	A05_Team 1
39	Na	Ma	A06_Team 1	A04_Team 5	A08_Team 1	A04_Team 2	A05_Team 2
40	Thomas Lobl, f	Lobl, Ph.D.	A01_Team 3	A02_Team 3	A08_Team 5	A04_Team 3	A06_Team 6
41	Lee	Riggs	A07_Team 3	A06_Team 2	A06_Team 4	A05_Team 6	A08_Team 3
42	Kathryn	Tarver	A01_Team 5	A02_Team 6	A03_Team 5	A07_Team 1	A05_Team 5
43	Mohammad	Sadoghi	A01_Team 6	A02_Team 5	A03_Team 6	A04_Team 6	A07_Team 4
44	Dave	Stewart	A01_Team 2	A06_Team 3	A03_Team 2	A02_Team 4	A03_Team 4
45	Aveek	Das	A02_Team 2	A08_Team 2	A03_Team 1	A03_Team 3	A04_Team 4
46	Paul	Sassenrath	A05_Team 3	A05_Team 4	A06_Team 5	A01_Team 4	A08_Team 4
47	Keith	Brown	A01_Team 1	A02_Team 1	A07_Team 2	A04_Team 1	A05_Team 1
48	Alyson	Kim	A01_Team 3	A02_Team 4	A04_Team 5	A04_Team 2	A02_Team 3
49	Svenja	Ehmsen	A03_Team 4	A03_Team 2	A08_Team 5	A04_Team 3	A06_Team 6
50	Arsalan	Jawaid	A01_Team 4	A06_Team 2	A06_Team 4	A05_Team 6	A08_Team 3

APPENDIX VI

Sample Dupont 400 RFIs (excerpt from email)



2/1/2021 SQL result - phpMyAdmin 2.11.11.3

SQL result

Host: 45.40.164.55
Database: chuckprofile
Generation Time: Jan 31, 2021 at 10:16 PM
Generated by: phpMyAdmin 2.11.11.3 / MySQL 5.5.51-38.1-log
SQL query: SELECT * FROM `profile` LIMIT 0, 50 ;
Rows: 42

profile_id	user_id	first_name	last_name	email	headline	summary
49	2	Pedro	Carrillo	Pedro Alberto Carrillo Peredo <pedro.carrillo.pe@ajegroup.com>	AjePer AjeGroup Perú	PENDING RFP/RFQ two (2) RO systems- No follow up data seen so far -Initial greensand request. RO mentioned - Pedro Alberto Carrillo Peredo <pedro.carrillo.pe@ajegroup.com> |Hello Martin, I am currently evaluating the implementation of two osmosis systems for two of our plants, where the main characteristic is the presence of Iron in high limits according to our need: Variable Required Parameters Source Water 4 pH 6.8 - 8.5 7.88 Alkalinity <50 ppm 230 Hardness <100 ppm 44 Turbidity <0.3 NTU 9.71 STD <400 ppm 211 Iron <0.1 ppm 0.33 CLR 0 0 Manganese <0.05 ppm - Aluminum <0.2 ppm Chloride <250 ppm Sulfate <250 ppm Sodium <50 ppm Required water flow: 200,000 L / month Source: Groundwater. I remain attentive to your recommendations of the suggested system. ---------- Atte., Pedro Alberto Carrillo Peredo Head of Quality Assurance - Peru AJEPER S.A. Tel. (+51) 313 3530 Extension 1087 Cell .: (+51) 990344564 Av. La Paz 131, Santa María de Huachipa - Lima 15	ORIGINALLY SUBMITTED DATA http://www.engineeringfundamentals.net/AjePeruOriginalRequest-2-RO-systems-with-partial-water-data.pdf
51	2	Ingmar Jose	Bellott Alandia	Ingmar Jose Bellott Alandia <IBellottA@alicorp.com.bo>	Alicorp Bolivia	CCRO RFI - Ingmar Jose Bellott Alandia <IBellottA@alicorp.com.bo>
52	2	Juan Manuel	Henriquez Vives	Juan Manuel Henriquez Vives <juan.henriquez@alpina.com>	Alpina Colombia	CCRO RFI - Juan Manuel Henriquez Vives <juan.henriquez@alpina.com>

APPENDIX VII

A promise kept (excerpt from email)

At 01:49 PM 7/2/02 -0400, you wrote:

Dear Martin,

A very interesting project. I believe your sites will be very useful to practicing engineers, and I encourage you to continue their development.

My current area of interest is nutrient removal, especially biological nutrient removal. I would suggest a site called, "The fundamentals of biological nutrient removal". Then you need one titled, "The economical benefits of biological nutrient removal". I jointly published a book on Biological Nutrient Removal in 1992 with Dr. James L. Barnard and Dr. H. David Stensel, with Technomics Publishing. My name is listed first in list of authors. I also wrote Chapter 8 (Design of Biological Phosphorus Removal Processes) in the WEF Special Publication, "Biological and Chemical Systems for Nutrient Removal". I sure the majority of the environmental engineers in South America think current problems are too great to worry about nutrient removal, but when you consider that the COD of algae produced by the nitrogen and phosphorus typically discharged by secondary treatment plants treating municipal sewage will exceed the COD of the raw wastewater, it can give you a different perspective. Then, when you consider that it frequently is more economical to practice biological nutrient removal wastewater treatment than conventional activated sludge systems, because of both reduced energy requirements and reduced waste sludge production, the utilization of biological nutrient removal processes becomes much more attractive.

C. Randall

Clifford W. Randall, PhD
The C. P. Lunsford Emeritus Professor
Civil and Environmental Engineering
Rm 418 NEB
Virginia Tech
Blacksburg, VA 24061-0256

Phone: 540 231-6018
FAX: 540 231-7916
http://www.cee.vt.edu/people/randall.html

APPENDIX VIII

Penn: We were there 20 years ago!

WE ARE CALLING FOR FALL 2022 LIONLINK PROJECTS

LionLink Projects is a new initiative that matches students and recent graduates with experiential learning opportunities offered by helpful Penn State alumni like you. **You gain support for your business or organization, while recent graduates and students get to apply their knowledge to acquire real-world experience.** Most important, participating Penn Staters form mutually beneficial professional connections by working together.

Your project is likely to be suitable for LionLink Projects if it:

- Can be completed in a virtual environment.
- Is résumé-worthy.
- Will give students or recent graduates an opportunity to demonstrate their skills to a prospective employer.
- Can be completed with 10 to 40 hours of work, in a span of 2 to 8 weeks.
- Meets Fair Labor Standards.

Sample projects:

- Creating a social media campaign
- Designing a website
- Creating a logo
- Analyzing data
- Supporting a fundraising event
- Conducting research
- Researching and writing grants
- Performing SOE analysis
- Drafting or forecasting budgets
- Conducting market analysis
- Creating or mapping data
- Editing books or videos

How to submit a LionLink Project proposal
Step 1: Log into your LionLink account. If you don't yet have an account, please sign up.
Step 2: Click on the "**Jobs**" tab.
Step 3: Go to "Experiential Learning Projects" and click on **"Explore Projects."**
Step 4: Click on "Post a Project," then select an appropriate template or create a custom project.
Step 5: Provide necessary details about the project's expectations, scope, and deliverables.

The LionLink Projects team reviews project proposals daily. Expect to hear from us in 3-5 business days with next steps.

LionLink Projects Fall 2022 Timeline:
August 29 – September 16, 2022: Alumni Project Sponsors can submit project proposals.
September 30, 2022: Deadline for students and recent graduates to apply for projects.
October 14, 2022: Alumni Project Sponsors should "hire" for their projects.
December 9, 2022: Project work should be completed.
More information: https://www.alumni.psu.edu/lionlinkprojects

Questions? Contact Alumni Career Services at 814-865-5465 or alumnicareer@psu.edu

APPENDIX IX: PDFs & PUBLISHED WORKS

Education related pdfs: Elementary/Special Education/High School (K-12)

http://engineeringfundamentals.net/spe400-special-education-project-dr-jacobs-southern-illinois-carbondale.pdf

http://engineeringfundamentals.net/tore-heskestadt-chappaqua-computers-in-the-classroom-software-evaluations.pdf

http://engineeringfundamentals.net/tore-heskestadt-chappaqua-computers-in-the-classroom-music.pdf

http://engineeringfundamentals.net/school-computers-quality-education-optimal-use.pdf

Curriculum Development

There was nothing back then so we had to start from scratch. Today same thing applies only instead of educational/other software is educational/other apps.

http://engineeringfundamentals.net/CrandonJuniorCollegeCourse.pdf

http://www.engineeringfundamentals.net/AmericanSchoolCurriculumDevelopmentSample.pdf

http://engineeringfundamentals.net/crandon-trumpet-studies-program.pdf

Likely University bound Ideation
p.s.: pasting link for the work-in-progress draft. Will welcome any and every possible type of recommendation/critique. Feel free to pass along for review/further queries/additional info/possible paths.

http://engineeringfundamentals.net/a-King-from-Stanford-and-a-scribe-from-Maryland-plus-Verizon.pdf

Business/Marketing/Content Marketing related pdfs/other

UC Davis Google SEO Capstone
http://www.engineeringfundamentals.net/GalopeApproach.pdf

Precursor to failed content marketing
http://engineeringfundamentals.net/WhiteMarketing.pdf

This is what we did with Dupont as a covid resistant stunt, elicited about 400 RFIs
http://engineeringfundamentals.net/Keep-Up-The-Splash-Up4.pdf

A typical preInternet marketing plan
http://www.engineeringfundamentals.net/InternationalMarketingSample.pdf

Internet will not make up for obsolete technologies
http://GlobalBrentwood.com

Engineering Field/Professional Publications
Sample Repacking Crossflow Cooling Towers (Spanish) August 1998
Step-by-step calculation of crossflow cooling tower calculations using ***Gauss Seidel 11*11 iteration matrix***.

Bioremediation - Fundamentals and Applications (Spanish) September 1999

Diffuser Systems (Spanish) September 1999
Introduction to Diffuser Systems as used in wastewater treatment plants.

Asociación Argentina de Aceites y Grasas (a pedido de Bunge SouthAm y Aceitera General Deheza)
http://engineeringfundamentals.net/R088-T11.pdf