

Enhancing Your Section or Chapter Event with Continuing Education Products and Services

Elya B. Joffe

Region 8 Chapter Coordination Committee Chair

and

EAB Continuing Education Committee Chair



Continuing Education Products and Services that Enhance Your Section or Chapter Event

- IEEE English for Engineering—Help your attendees enhance their Technical English skills
- IEEE eLearning Library—Publish your workshops, or present ours to your attendees
- IEEE iTunes U—Reach 200 million iTunes users
- IEEE Online Education Portal—Create your own education site to support your conference
- IEEE Technical Communications Training Program—Add quality “soft skills” workshops to your conference
- IEEE Certificates Program—Award official IEEE Certificates to your attendees

IEEE English for Engineering

A new IEEE eLearning resource that improves communication skills for engineers and other technical professionals

For more information contact:

Jill R. Bagley
Senior Product Manager
Continuing Education and
eLearning
j.bagley@ieee.org



IEEE English for Engineering Design

Develop and improve the communications skills and knowledge engineers need to succeed:

- More than 45 hours in online learning content
 - Listening
 - Speaking
 - Reading
 - Writing
- Introductory, Intermediate, and Advanced course levels
- A dynamic and highly interactive online learning experience
- Printable individual certificates upon the successful completion of each module
- Free Placement Test available to assess and guide level selection

IEEE English for Engineering

Choosing the Correct Word

Explaining and Assessing Manufact...

Explaining and Ass

Again referring to the prom


What makes waterj...
Water jets require...
produce **net-shaped** p...
or **mechanical** stresses...
a **narrow kerf**, and can...
can be **tightly nested**...
and intuitive operation...
operators can be traine...
hours. Additionally, wat...
smooth edge.

Secondary Operations refe...
Net-shaped parts...
Heat-affected zon...
Mechanical stresses refe...
A Narrow ke...
Tightly nested me

Describing Types of Technical Problems

Listen to Sabino talking about some technical problems the team had at the test session and select whether the following statements are True or False.

	True	False
Some liquid was lost from a pipe.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
A car lost all its coolant with the engine still running.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
A car's engine stopped on the circuit.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Some tires were damaged.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A wheel nut fell off a car on the circuit.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A car's suspension was broken.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Sorry, that is incorrect. Press the  button below to proceed.

0:21/2:49 8 of 20

0:00/0:00 10 of 20

Event Connection—Live Workshop Sessions

- Individual modules can be presented in a workshop/group session with a facilitator
- Focus on a key communication skill area
 - Select appropriate level for audience (Introductory, Intermediate or Advanced)
- Available resources help instructor guide learners through exercises
 - Provide handouts
 - Lead group activities
 - Group exercises with instant feedback
- Earn certificates upon completion



IEEE eLearning Library

The premier online collection of short courses and conference workshops

For more information contact:

Jill R. Bagley
Senior Product Manager
Continuing Education and
eLearning
j.bagley@ieee.org



IEEE eLearning Library

- Online, interactive courses to keep engineers up-to-speed on emerging technologies and trends
 - Dynamic interface, professional voiceover and animations
 - Tutorials range from 1-2.5 hours each
 - Certificates upon successful completion
- Tutorials in key technology areas
- Developed, peer-reviewed and updated by leading experts in the field
- Includes extended series and offers introductory, intermediate, and advanced levels in many subjects

Outline

1. Evolutionary Optimization Methods in Engineering
2. Author Biography
3. Overview
4. PSO and Topics Covered in this Course
5. Evolutionary Path of This Talk: Part II – Part I
6. What is Optimization?
7. A Typical Optimization Problem How to Find
8. Types of Optimization
9. An Important Observation
10. Engineering Design Steps & GA and PSO
11. Winning Features of GA and PSO
12. Sample Applications in Electromagnetic and
13. Evolutionary Path of This Talk: Part II – Part
14. Fundamentals of Particle Swarm Optimizati
15. A Useful Tutorial Paper Presenting Fundan
16. PSO Concept
17. Types of Optimization
18. PSO: The Big Picture
19. Particle Swarm Optimization (PSO)
20. PSO Vocabulary
21. Six Basic Tasks in PSO Implementation
22. Particle and Position
23. Fitness or Cost Function
24. Personal Best (pbest) and Global Best (gb
25. PSO: Mathematical Details

Evolutionary Optimization Methods in Engineering: Part II – Particle Swarm Optimization (PSO)

Yahya Rahmat-Samii

Distinguished Professor Electrical Engineering Department
U of California Los Angeles (UCLA), U.S.A.



SLIDE 1 OF 96

PAUSED

00:01 / 00:12



2013 Upcoming New/Expanded Series

- Advanced Circuit Design
- Cloud Computing (new 30 course series)
- Electric Vehicles (Batteries series)
- Professional Leadership Skills
- Photonics
- Vehicular Technology

Developed and Reviewed by Experts

- Peer-review process ensures each IEEE eLearning course meets the IEEE standard for quality and accuracy
- Each course must pass a rigorous review process by IEEE societies and experts, as well as faculty from renowned corporations and universities worldwide
- An editorial board updates existing content regularly to ensure it remains current



Event Connection—Facilitated Group Sessions

- Individual tutorials can be presented in a workshop/ group session with a facilitator
- Show the tutorial and lead group discussion on the topic
 - Lead group activities
- Earn certificates upon completion

IEEE Education Publishing Tools

FREE tools for publishing your conference education content and keeping the conversation going online

For more information contact:

Steve Welch
Director of Continuing Education

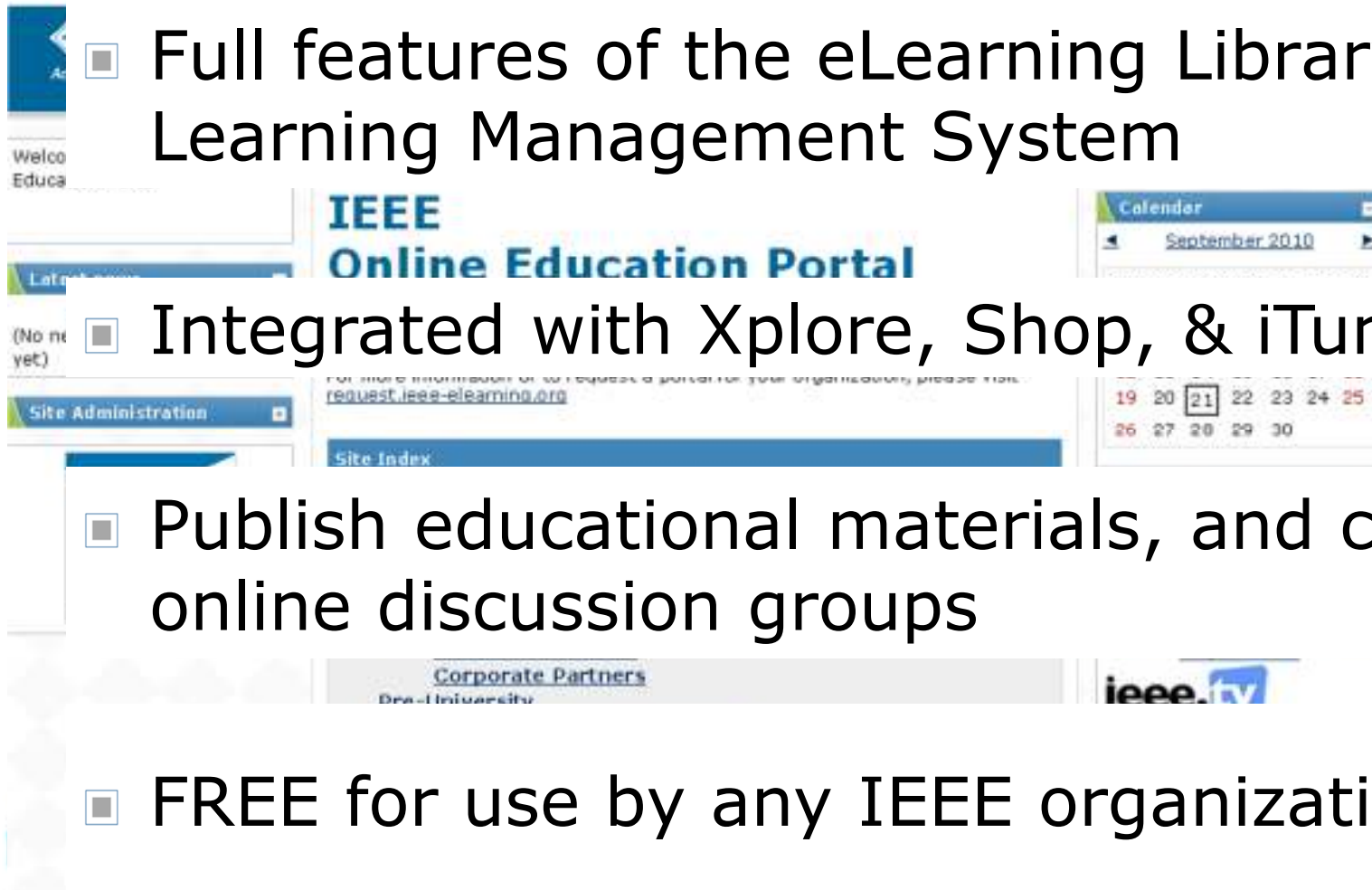
s.m.welch@ieee.org



IEEE Online Education Portal

<http://info.ieee-elearning.org>

- Full features of the eLearning Library Learning Management System
- Integrated with Xplore, Shop, & iTunes
- Publish educational materials, and create online discussion groups
- FREE for use by any IEEE organization



Online Education Portal Uses ...

There are many uses for the Online Education Portal. Here are just a few ...

- Repository for documentation
- Hold limited access/permission based training courses
- Share and collaborate on topics, documents and media
- Sell learning content

Please visit info.ieee-elearning.org for more information.

IEEE iTunes U Beyond Campus

<http://itunes.ieee-elearning.org>

The screenshot shows the iTunes U interface for IEEE. At the top, there's a navigation bar with links for Music, Movies, TV Shows, App Store, Books, Podcasts, and iTunes U. The main header features the IEEE logo and the tagline "Advancing Technology for Humanity" alongside a photo of three people working on a laptop. Below the header, there's a "Description" section explaining IEEE's mission. The "What's New" section is divided into "Most Popular" and "See All" categories, displaying various content items like "Nanotechnology", "Computing IEEE eLearning Series", "IEEE GHN", "Biometrics IEEE eLearning Series", "Components, Circuits and Drives", and "Engineering Management IEEE...". The "Top Downloads" section is also divided into "Most Popular" and "See All" categories, listing items such as "Silicon-Germanium (SiGe) IC Devi...", "Management Skills: Stuff You Don't Learn...", "An Introduction to Leadership: A Pri...", "Thinking Like a Leader: The IR Syst...", "Transition into Management", and "The Essential Skills: Stuff You Don't Learn...". On the right side, there are sections for "RESOURCES FROM IEEE", "IEEE eLearning Library", "IEEE eLearning Library ON ITUNES U", "IEEE HUMANITARIAN TECHNOLOGY WEBINAR SERIES", "IEEE GLOBAL HISTORY NETWORK", and "IEEE Global History Network". The bottom right corner features the IEEE logo and tagline.

IEEE iTunes U Beyond Campus

<http://itunes.ieee-elearning.org>

- iTunes U: Like YouTube for Scholars (MIT, Stanford, Smithsonian, Cambridge, Harvard, Oxford)
- Video, podcasts, pdfs, ebooks
- Societies and OUs have their own home page and control the branding and Web links
- Promote your conference by creating an iTunes U Site
- All content must be free and publicly available

IEEE iTunes U—GHN



IEEE Technical Communications Training Program

Turnkey short-course materials for use at your event

For more information contact:

Steve Welch
Director of Continuing Education

s.m.welch@ieee.org



IEEE Technical Communications Training Program

- Mix-and-Match face-to-face training modules for use at your event:
 - English for Engineering Live
 - Technical Writing Skills Workshop
 - Technical Presentations Skills Workshop
- Each module available in half-day to two-day lengths
- Use our trainer or your trainer with our train-the-trainer materials
- Trainees can also access eLearning modules after the conference to keep the training going
- Enhance your event's revenue-earning opportunities



IEEE Certificates Program

An expanded resource allowing conferences to award official IEEE Education Certificates to workshop attendees

For more information contact:

Michelle Demydenko
Continuing Education
Coordinator

m.demydenko@ieee.org



Program Overview

- **Offers IEEE certificates** to users who complete learning events (Webinars, workshops, tutorials, etc) sponsored by IEEE organizations
- Many **professional engineers** must have such certificates to **maintain their license**
- Program has been **in effect for 15 years**, but costs have prohibited some organizations from participating
- **In 2013, we are relaunching** the program to make it accessible for *all* IEEE learning events

IEEE Certificates Program

- **Automated application process** with new administrative database for faster processing and management
- **Highest quality** of service for sponsors and students
- Certificates can be awarded for education, training, and/or webinars from **IEEE Societies, Sections, Chapters** or other OUs
- **New, automated, Web-based system** allows EA to offer the service *at no charge* for any IEEE OUs
- More than **10,000 certificates** have been awarded in the past year

Certificates Enhance the Value of Your Event

- **Licensed engineers** can document continuing education
- **Professionals** can document their participation
- **Students** enhance their academic reputation
- Personalized recognition of event participation

Certificates Offered

Through EA, IEEE-sponsored events award:

- Continuing Education Unit (CEU)
 - Meets our strict CEU guidelines

- Professional Development Hour (PDH)
 - Meets our comprehensive PDH guidelines

- Certificate of Completion (CC)
 - Acknowledges participation, attendance, or completion





CERTIFICATE OF COMPLETION

This is to certify that

Elya B. Joffe

has completed the course

IEEE Region 8 Committee Meeting

April 20-21, 2013

1.2 Continuing Education Units; 12 Professional Development Hours

Michael Lightner
Vice President, IEEE Educational Activities Board



CEU
IEEE CONTINUING EDUCATION

Pricing

- **Free service to all IEEE Organization Units**
 - Increase engagement and relevance to IEEE OUs
 - Allow IEEE OUs to enhance the value for their learning events and attract more people

- All non-IEEE customers will be charged for service
 - \$20 per person/per event
 - Continue to generate organic revenue from current and new external sponsors

Application Process

- Application Process:
 1. Complete online application
 2. Allow five (5) business days for approval
 3. Complete the learning event
 4. Complete and submit all required documents, including course roster

- Contact Information
 - Via e-mail: eab-ceuadmin@IEEE.ORG

Questions

