Professional Development

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Embedded Power Labs
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Overview

• A Bit About Me...
• What Is Power Electronics?
• Success And Failure
• Which Ladder?
• When To Change Jobs

• Advancing Your Career
  – Embracing Diversity
  – Professional Visibility
  – Continuous Learning
About Me

• US Air Force Veteran
• Digital Equipment Corp.
• AT&T Power Systems/ Bell Laboratories
• Zytec/Artesyn Technologies/ Emerson Electric
• VU1
• Embedded Power Labs
• Instructor, CU ECEE Dept.

• Individual Contributor ⇒ VP Engineering
• Product Design
• Technology Development
• Systems Engineering
• Applications Engineering
• Technical Marketing
• Consultant
About Me

• IEEE Power Electronics Society
  – Adcom Member
  – Technical Vice President

• IEEE Applied Power Electronics Conference (APEC)
  – Involved Since 1987
  – General Chair 1990, 2000

• Power Sources Manufacturers Association (PSMA)
  – Committee Leader

• BSEE, MIT

• MSEE, WPI

• Ph.D. Candidate, CU

• IEEE Fellow
What Is Power Electronics?

- Information
- Control
- Communication
- Energy
When You Succeed...

Be Gracious And Humble
Acknowledge Others
Be Thankful

When You Fail...

Accept And Acknowledge
Learn And Grow
From Your Experience
Which Ladder?

Technical

Managerial
When To Change Jobs?

When You Are Moving To Something Better

And Not Just Running Away
Factors For Professional Success
Embracing Diversity

• Embracing Diversity Teaches Us Different Perspectives And Ways To Think
• The More Perspectives We Can Bring To Solving A Problem The Better The Solution We Can Offer
Embracing Diversity

Actively Listen

Travel!
Professional Visibility

It’s Who You Know
Professional Visibility

It’s Who You Know

It Is Who Knows You

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Professional Visibility

Publish Or Perish
Professional Visibility

Publish Or Perish

Publish And Pro$per
Publish At Every Opportunity

• IEEE Journals And Transactions
  – Look Good On Resumes
    But Not Good For Overall Exposure
• Publish In IEEE Society Magazines And Newsletters
• Publish In Trade Magazines/Websites
  – Wide Circulation Is Good Exposure
  – Easy To Get Articles Accepted
• Your Company’s App Notes And White Papers
Present At Every Opportunity

• Internal To Your Company
  – Example: If You Go To A Conference, Give A Presentation On What You Saw At The Conference

• Be A Presenter For Your Company’s Customer Focused Technical Training Sessions, Seminars, And Webinars
Present At Every Opportunity

• IEEE Conferences And Workshops Are Excellent Exposure
• Commercial Conferences Can Be Good Exposure But Don’t Give A Pure Sales Pitch
• Local IEEE Events Are Good Local Exposure
You Do Not Think You Are A Good Speaker?
You Do Not Have Enough Confidence
To Speak In Public?

Join Toastmasters!
Participate In Online Forums

• LinkedIn Used To Be The Forum For Professional Discussions
  – LinkedIn Is Evolving So Stay Tuned
  – Keep Your LinkedIn Profile Up To Date
• Don’t Be Just A Passive Lurker
  – Give General Updates Like Announcing You Will Be Presenting A Paper At A Conference
  – Contribute To Group Discussions
• If Possible, Also Contribute To Other Forums Like TI’s E2E Or Microchip’s User Forums
• Keep Personal Information And Opinions To Yourself
Join the IEEE And Participate

• Local Sections And Chapters
• Society Committees
• Conference And Workshop Committees
• Standards Committees
• Review Papers For Journals And Conferences
Other Professional Societies

- Many Other Related Professional Societies
- SAE
- ASHRAE
- ISA
- And Dozens More...
Other Organizations

- Charitable Organizations
- Service Organizations
- Local Government

Build Connections

Leadership Skills
Other Organizations

• Charitable Organizations
• Service Organizations
• Local Government

Political And Religious Organizations May Be Personally Satisfying, But Do Not List These On Your Resume Or LinkedIn Profile

Enhance Resume
Learn Something New Every Day

• Read IEEE Publications
  – Magazines (Spectrum, Society Magazines)
  – Conference Papers
  – Journals And Transactions
• Read Trade Press Magazines And Websites
• Read Technology News
• Read Industry And Business News
Learn Something New Every Day

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  - Magazines (Spectrum, Society Magazines)
  - Conference Papers
  - Journals and Transactions
- Read Trade Press Magazines and Websites
  - Example: Bodo’s Power Magazine
  - Example: How2Power
- Read Technology News
- Read Business News

Read Every Day!
Continue Your Education

• MOOC Courses
  – Coursera, EdX
• Attend Conferences And Workshops
• Attend Seminars and Webinars
  – Both IEEE And Commercial/Vendor Offerings
• University Distance Learning
  – Keep Taking Courses To Broaden Or Deepen Your Knowledge
  – Even Consider Another Master’s Degree
Succeeding In Industry

• You Cannot Simply Sit At Your Desk, Do A Good Job, And Expect To Be Recognized
• You Must Promote Yourself And Your Accomplishments
• But Don’t Be A Jerk Or Prima Dona!
• When Talking To Management, Emphasize How Your Work Benefited The Company
  – Quantification In Money Gets Management Attention
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The Best Way To Succeed Is To Make Your Boss Look Good To Their Boss!
Summary

• Be Gracious And Humble In Success
• Accept And Learn From Failure
• It’s Who Knows You
• Give Back - Volunteer And Serve
• Learn Something New Every Day
Thank You!