


Laura A. Ubelhor – Consultech Services, Inc.
lubelhor@consultechservicesinc.com



The Next Generation on IBM i



2/22/2018

The Next Generation on IBM i Presented
by Laura Ubelhor Consultech Services, Inc.

Laura A. Ubelhor Consultech Services, Inc.

IBM Technical Consultant, Developer / IBM i Advocate, Volunteer and Education Enthusiast

President of SEMIUG

Secretary of Common Education Foundation

IBM i Business Partner Specializing in Application Development and Support

Owner and operator of Consultech Services, Inc. since 1992

Author of IBM articles and books

IBM Champion

Contact: lubelhor@consultechservicesinc.com

Phone 248-628-6800



The Next Generation on IBM i



TALENT ACQUISITION RESOURCE FOR THE FUTURE

- Many organizations face the need to fill positions
- Looking to acquire new resource to fulfill IT support requirements
- Pool of seasoned experienced resource isn't as large as it once was
- Evolution of platform has changed the skill requirements
- Placing an ad isn't always the most effective method to fill positions
- Where do you turn?

Finding Solutions to fill resource need



- **Organizations can and are finding solutions**
- **Misconception there aren't resource to fill positions**
- **There are fresh faces ready and eager**
- **So where and how do you find fresh faces?**

Option for finding resource

- Local user groups connecting community with resource
- Connecting with Colleges
- CEF (COMMON Education Foundation)
- Mentor young or new IT resource
- Training
- Recruiting within from other departments
- Consulting and Outsourcing
- Cloud
- Connecting with IBM i Academic Initiative
- Job boards and recruiters
- Training focused for new resource
- IBM i Fresh Faces
- Reach out to others – don't reinvent the wheel



By no means “all inclusive”.

Local User Groups

- Local User Group in Your Area
SEMIUG www.semiug.org
WMSUG <http://www.wmsug.net/home.html>
Midrange Meet Up Grand Rapids
- Connect community with local schools and students
- Student activities and competitions
- Annual conference events featuring students
- Post and share job information
- Groups outside of your area

USER GROUPS





- **Reach out to board members**
- **Sign up for notifications**
- **Join as a member**
- **Participate in group student activities**
- **Encourage student activities and competitions**
- **Engage with other group members**
- **SEMIUG an WMSUG connect with local colleges**
- **Request to have job posted on group site and/or featured in group correspondence**
- **Sponsor students**



Local User Groups

MITEC Annual Conference Event

Sponsored by SEMIUG and WMSUG



- www.gomitec.com
- Students participate and are featured at the event
- This year Thursday July 14, 2018
- Features student meet and greet
- Great results to date connecting students with jobs and organizations with resource
- Individuals looking for opportunities attend
- Opportunity to converse with organizations in your area
- Sponsor a student(s) at the event

Local User Groups

- Pictures from MITEC events featuring students



Local User Groups

- **Pictures from MITEC events featuring students**



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Local User Groups

- **Pictures from MITEC events featuring students**



Local User Groups



Groups outside of your area

If you're not familiar with a group in your area or want to reach out further where do you go?

IBM Site – IBM i local user groups

<https://www.ibm.com/developerworks/community/wikis/home?lang=en#!/wiki/Power+Systems/page/IBM+i+Local+User+Groups>

COMMON Site

[http://www.common.org/local-user-groups/.](http://www.common.org/local-user-groups/)

Connecting with Colleges

- **Several Colleges across the country that include IBM i curriculum**
- **Several colleges in our area including IBM i curriculum**
- **If you're not familiar visit the IBM i Academic Initiative web site**

<https://www.ibm.com/university/power/ibmi.html>

Choose participating schools link

displays list of schools by State

- **Visit facebook page Power on Campus – the IBM Academic Initiative**
- **Email at powerskills@us.ibm.com**



Connecting with Colleges

CEF (COMMON Education Foundation) may be able to assist connecting you to colleges in your area

<https://www.commoneducationfoundation.org/>

While at COMMON connect with CEF

Visit the foundation booth

Email foundation@common.org

Visit www.common.org

PowerUp18 May 20-23, 2018 in San Antonio, TX

Students that are willing to relocate or work remotely



Connecting with Colleges

Colleges in our area including Power Systems Curriculum



**Baker
College**



**Muskegon
Community
College**



**DAVENPORT
UNIVERSITY**



**FERRIS STATE
UNIVERSITY**



**OAKLAND
COMMUNITY
COLLEGE**



**GRAND VALLEY
STATE UNIVERSITY**

Kalamazoo VALLEY™
community college



**Lambton
College**

**Lawrence
Tech®**
Architecture and Design

Connecting with Colleges

MCC and IBM i curriculum youtube



Baker Job Fair



<https://www.careereco.com/Fair/RenderPage?fairPageId=8da74179-0e55-4467-9506-a86c01148953>

Post on College job boards

Contact the college to find out links to sign up for job boards

Connecting with Colleges

- MITEC and other conference events
 - Student meet and greet
 - Feature students
 - Students present at events

- Student activities
 - Code a game on IBM i
 - Member project team up group member with students
 - Encourage and make suggestions



Connecting with Colleges

Connect through

- User groups
- COMMON
- COMMON Education Foundation
- IBM Academic Initiative
- Posting on college job board
- Contact college directly
- Contact educators
- Participate in college activities



- ❖ Consider colleges in your area with an IT program
- ❖ Student with desire and aptitude may be a great fit
- ❖ Bring in the student as an intern
- ❖ Provide IBM i training
- ❖ Use in house mentoring
- ❖ Train the student technically and to understand your business

Connecting with Colleges



CEF

COMMON Education

Foundation



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Mission

Nurture the development and growth of future IT professionals who will manage and support the computing systems of tomorrow.

<https://www.commoneducationfoundation.org/>



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What CEF Offers

- Student Sponsorship
- Student Scholarship
- Education Sponsorship
- COMMON community scholarships
- Ongoing Initiatives
- And much more



- **Resources**

- Career Center
- COMMON certification
- Online Education
- Video Library
- Blog

- **Partners**

- COMMON
- IBM Academic Initiative
- Community

COMMON Education Foundation

Connect with Educators and Students

- **Fall COMMON event**
- **Annual COMMON event**
- **Booth at events**
- **Student sessions and activities**
- **Reach out to CEF to find educators and students**
- **Facebook**
<https://www.facebook.com/common.education.foundation/>
- **Twitter** https://twitter.com/cef_common
- **Email** foundation@common.org



Pictures tell the story well

What started with a few students sponsored at COMMON conference events has grown to a large group each fall.

- **Connecting community to educators and students**



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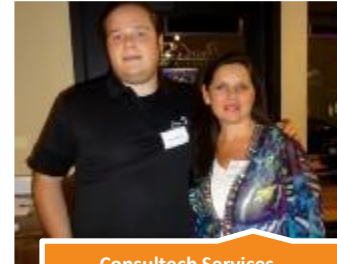
COMMON Education Foundation

Support CEF

- Sponsor a student
- Provide a contribution
- Contribute to the silent auction
- volunteer



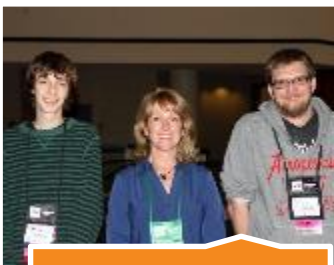
Arbor Solutions -
Gateway Technical College



Consultech Services -
Pennsylvania College of
Technology



WMPCA -
Gateway Technical College



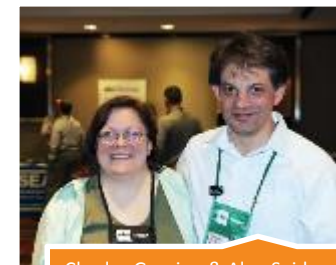
Kim Greene Consulting-
Muskegon CC & Gateway Tech



Maxava iFoundation Grant -
Arkansas Tech University
students



HelpSystems -
2 Gateway Technical students



Charles Guarino & Alan Seiden
Consulting (not pictured) -
Muskegon Community College



IBM Power Systems Academic
Initiative - all 5 instructors

Training

Don't overlook training options

- College courses/classroom training
- Online classes
- Onsite training
- Book learning
- Conference events



TRAINING

No particular order and not inclusive of all offerings

- **ImPower Technologies** <https://impowertechnologies.com/>
- **Rochester Initiative** <http://www.lab400.com/>
- **Partner400** <http://partner400.com/OnsiteTraining.htm>
- **ComCon** <http://www.comconadvisor.com/courses.html>
- **Manta Technologies, Inc.** <https://www.mantatech.com/>
- **Global Knowledge IBM Training Courses**
<https://www.globalknowledge.com/us-en/training/course-catalog/brands/ibm/>

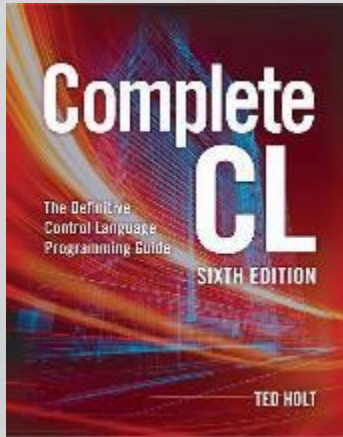


IBM Training Courses

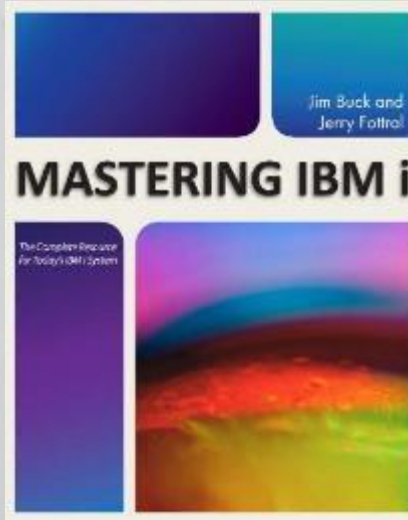
- 400School <http://www.400school.com/>
- Interskill Learning <https://www.interskill.com/>
- Myenskill <https://enskill.com/>
- AS400 online <https://As400online.com>
- Learn Quest <https://learnquest.com>
- Central Park Data Systems, Inc.
<http://www.centralparkdata.com/rdi-training.html>

Training

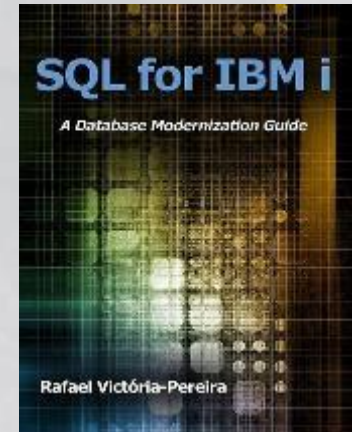
Books



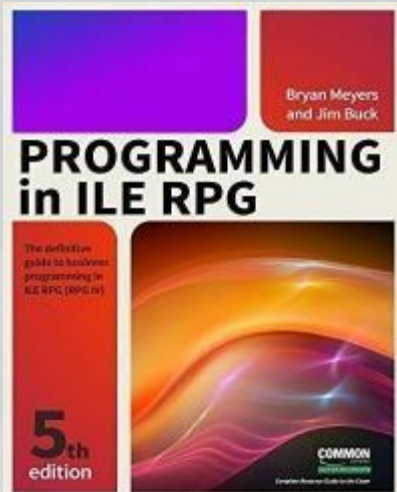
Complete CL 6th Edition
Ted Hold
MCPress



Mastering IBM i
Jim Buck and Jerry Fotral
McPress



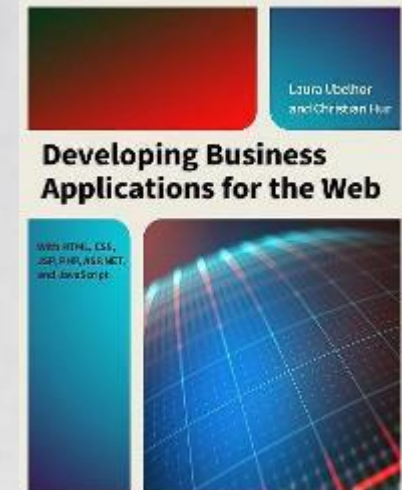
SQL for IBM i
Rafael Victoria-Pereira
MCPress



Programming in ILE RPG
Brian Meyers and Jim Buck
MCPress

Visit MCPress Bookstore

<https://www.mc-store.com/>



Developing Business Applications for the Web
Laura Ubelhor and Christian Hur
MCPress

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Training



Conference Events

- **IBM Think 2018 March 19–22
Las Vegas**
- **RPG and DB2 Summit March 20-22, 2018 in Dallas**
- **COMMON PowerUp18 May 20-23, 2018 in San Antonio,
TX www.common.org**
- **MITEC Thursday June 14, 2018 www.gomitec.com**
- **Many other local user group events across the country
user groups publish information
IT Jungle provides calendar of events
WMCPA event Tuesday, March 13 to 15, 2018
TUG event March 26 to March 29, 2018**

Recruiting Within



- **Don't overlook options within your organization**
- **Invaluable Business Experience with aptitude and desire**
- **Business Skills and Understanding of your organization**
- **Business process understanding is a great base**
- **Build upon with training**

Recruiting Within

- **Reach out to those within your organization**
- **May have a hidden gem**
- **Training and mentoring**
- **Within IT Dept or affiliated organization location**
- **Other Departments**



Mentor young or new IT resource

- **Bring in a resource with a base to build on**
 - . IT Student
 - . New external resource
 - . New resource from within
- **The base can be IT Skills or business/industry skills**
- **Build on the base with mentoring and training**
 - . Provide IT mentoring specific to your environment
 - . Provide mentoring to learn your business



Mentor young or new IT resource

Choose mentors wisely

- someone retiring – plan ahead
- experienced IT staff member(s)
- choose someone with skills desired
- choose someone with skills to mentor
- Have a team of mentors



Consulting and Outsourcing



Many consulting organizations focused on IBM i

May be long term or short term solution

Option while training or mentoring or long term solution

Assist until internal staff has skills needed or to supplement staff needs

Establish relationship to call upon as needed

Each organizations requirements are unique

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Consulting and Outsourcing

Often used when

- **needing specific skills**
- **extra hands on a project**
- **supporting day to day**
- **supplement staffing needs**

Support as needed

- **supplement while mentoring**
 - **supplement during transition**
 - **monitor system**
 - **programming resource**
 - **training**
-
- **may find solution fits your needs and budget for short or long term solution**



Consulting and Outsourcing



Benefits

- **Eliminate need for in-house resource**
- **Bring in skills and expertise**
- **Can be a cost savings**
- **Let inhouse resource focus on core business**
- **Improve quality**

Cloud



- Lots of Buzz around cloud
 - Public, Private and Hybrid
 - Hosting Hardware
 - Hardware and software services
 - Many organizations providing cloud services for IBM i
 - Supplement or replace staff
 - Use for all or some of your IT support needs

- Sources
 - IBM, Infor, Connectria, Krengletech, iDevcloud.....
 - Check with software provider
 - Check with hardware provider
 - Research endless list of providers

Cloud



- Why Cloud
 - Eliminate need for inhouse resource
 - Supplement inhouse needs
 - Software services to keep applications current
 - Can find a solution to fit your budget
 - Lack of inhouse experience

- Successful cloud offerings
 - Network
 - Hardware
 - Software/applications
 - Helpdesk
 - Email
 - Disaster Recovery
 - Much more.....

Cloud

Keys to
successful
cloud solution



- Due diligence
- Choose a provider with experience
- Compare pricing
- Check with references
- Onsite visit
- Contract – make it right
- Support hours
- RPO and RTO (recovery point and time objective)
- Be sure to consider if needs change

IAI - IBM Academic Initiative

- Program helps educators worldwide teach students market ready skills
- Helping educate the next generation of IBM i resource
- Used worldwide across all industries
- Reliable IT infrastructure
- Helping address growing demand for IT skills



IBM Academic Initiative



- Provides wide range of resources to assist with learning and teaching
- Provide professionally developed courseware for classroom or virtual use
- No charge to IAI members

IAI - IBM Academic Initiative

Beyond teaching

- Information and connection to community
- Connect community with educators
- Connect community with students
- Work with local user groups
- Work with COMMON and CEF
- Find schools in your area



Visit <https://www.ibm.com/university/power/ibmi.html>

Facebook page Power on Campus – the IBM Academic Initiative

Email at powerskills@us.ibm.com

Job Boards and Recruiters

- Traditional route – post a job
- Easier with internet
- Sometimes fees or membership
- Many sources
 - Dice
 - Indeed
 - Monster
 - AS400jobs.com
 - LinkedIn
 - Career builder
 - Craigslist
 - Simply hired
 - USA jobs



Job Boards and Recruiters

Job Boards

- Local User Group posting
- IAI job board

<http://powersystemsjobs.com/>



- COMMON Career Center

<http://www.common.org/career-center/>

Job Boards and Recruiters

Recruiters:

- **Check references**
- **Ask about other IBM i placement**
- **Ask about fees and charges upfront**
- **Provide detailed information on your needs**
- **Ask who others have used**
 - reach out on blogs**
 - reach out to employees**
 - reach out to HR**
 - reach out to industry colleagues**
- **TEK, Robert Half, Wolverine, Kforce, Manpower, Kelly Services, Tata and many more**
- **Consider large and small organizations**



Job Boards and Recruiters

Take time to prepare information

- Job title
- Job summary
- location
- Skill requirements
 - Must have
 - desired
- Direct hire or consultant
- Travel requirements
- Salary/wage offered
- Benefits provided
- Onsite or remote
- Education requirements
- Industry and company information



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Consider your environment

Do research

Find out what successful organizations are doing to make the environment desirable

Find out what factors attract the next generation
Make your organization stand out

May want to use testing tools
skills testing
hire assessment

If resource doesn't have all of the skills required
be prepared to provide training



Training focused for new resource

COMMON Boot Camp

<https://www.common.org/online-education/boot-camp/>

- Programming in ILE RPG
- IBM i Systems Administration
- Basic Power Systems Hardware Overview
- File Systems
- IBM i Work Management
- Problem Reporting and Management
- Starting the System
- Setting Up the System
- IBM i Virtual Optical and Virtual Tape
- IBM i Networking
- IBM i Backup and Recovery Basics
- CL Programs, Commands and Using SQL to Manage Your System
- Installing IBM i and Licensed Program Products
- PTF Installation and Maintenance
- Analyzing and Understanding Disk Space Utilization
- Database Management
- Practical Management of the System



Training focused for new resource



COMMON online education <http://www.common.org/online-education/>

- **Webcasts**
- **Members Only Webcast**
- **Webinars**
- **Video Tutorials**
- **User group members automatically COMMON members**

IBM i Fresh Faces

Inspiring publication
By IBM Systems Magazine

http://www.ibmssystemsmagpowersystemsdigital.com/nxtbooks/ibmsystemsmag/2017FreshFacesIBMi_october/index.php#/1



IBM Systems MAGAZINE
OCTOBER 2017

FRESH FACES

PUSHING BOUNDARIES
Meet the next generation of Power Systems innovators

SPONSORED BY **FRESCHÉ!** **ATS GROUP**
ADVANCED TECHNOLOGY SERVICES

FRESH FACES |

CHELSEA FENTON

SENIOR WEB DEVELOPER
FRESCHÉ SOLUTIONS

work with organizations that run their critical IT infrastructure on IBM i to develop innovative web applications that help evolve business practices. I'm part of a team that develops applications written in PHP and RPG for businesses of all sizes. I've worked on many projects including e-commerce applications, warehouse management systems and mobile enablement. My favorite part of my job is watching projects progress from beginning to end.

I love the stability and reliability of the IBM Power Systems® platform. When I've had issues with an application, the cause is rarely the box itself. It just works.

I started with BCD (now Fresche Solutions) in 2006. It was about a year out of university, and I'd never heard of IBM i. It was a learning curve at first, but now most things are second nature.

As I work with clients, I see they want to simplify their IT processes. For instance, they want to reuse data and business rules without duplicating logic and programs. This insight is helping me develop applications that are simpler and deliver more value to clients. Seeing organizations benefit from the solutions we've built is very gratifying.

TYSON THORNTON

NOC OPERATOR
AFSU, INC.

"I've been working on IBM Power® for about 10 months. Before I took my present job, I had never even heard of IBM i. The thing I appreciate most about the Power platform is that it's very easy to pick up. Once you learn some of the techniques, everything just falls into place. Currently I'm using IBM i to offer a managed service solution to our clients. Clients want to know their system is faster, safer and always being monitored 24-7-365. They also want their solutions to have worry-free management. They love that we can walk them through any issues they're facing.

The IBM i is a fun platform to work on. The community is very helpful and welcoming. Being part of the community has helped a great deal with my work. I attended the Spring IBM Technical University in Orlando, Florida, and discovered some of the common solutions that other IBM i users have employed. Many opportunities exist for young IT workers who have IBM i and Power skills.

BECOME A FRESH FACE

Interested in becoming a Fresh Face or know someone who would be a great candidate? Reach out to Elizabeth Hudson or Brandon Pedersen to learn more.

ehudson@us.ibm.com
[@ibizabeth_h](https://twitter.com/ibizabeth_h)

bpeders@us.ibm.com
[@IBPED07](https://twitter.com/IBPED07)

EDUCATOR PROFILE |

JIM BUCK

PRESIDENT,
imPOWER TECHNOLOGIES

HOW MANY YEARS DID YOU WORK IN EDUCATION?

For the last 15 years I worked as an IT programming instructor at Gateway Technical College in eastern Wisconsin. I retired at the end of the 2016-2017 academic year and started my new company where I will continue to provide training to young and seasoned programmers on the latest IBM i technologies.

DURING YOUR TENURE AT GATEWAY, ABOUT HOW MANY STUDENTS DID YOU TEACH ABOUT IBM I?

It varied over the years depending on enrollment, but I would guess over 500.

WHAT WAS THE MOST INNOVATIVE IBM I-RELATED CHANGE YOU WITNESSED DURING YOUR CAREER?

This is a very exciting time to be involved with the IBM i platform. For most IBM i companies, the major changes are to IBM i, Db2®, RPG and the development tools. Many of these advancements are just starting to become mainstream in many companies, which is raising the need for quality education.

WHAT MAKES YOU THE MOST PROUD OF YOUR CAREER?

I am very proud of the fact that so many of my students are employed working on the platform. Companies would inquire about my students every year and many had jobs before finishing the program. Besides teaching them IBM i technical skills I also taught them the skills that would make them successful IT professionals—doing the job correctly, turning in projects on time, working in groups and understanding that they should always add value to an organization. Watching my graduates continue to grow both personally and professionally and knowing that I was an important part of getting them started makes me proud.

ASIDE FROM YOUR CAREER IN EDUCATION, IN WHAT OTHER WAYS DID YOU CONTRIBUTE TO THE IBM I COMMUNITY?

For 13 years, I served as president of the Wisconsin Midrange Computer Association (WMCMA). I handed over the helm of the organization to Ajay Ganes, He is now the leader of the WMCMA and most members of the current board are graduates of mine. My goal when I took over the WMCMA was to have young people see the value of professional organizations because I believe young people are our future!

In his free time, Jim Buck enjoys sailing and is president of the Kenosha Community Sailing Center.

IBM i Fresh Faces



Inspiration and
Optimism

2/22/2018

Videos

<https://www.ibm.com/power/operating-systems/ibm-i>

Fresh faces youtube

<https://www.youtube.com/watch?v=BmZJ-lhcyfk>

Why develop on IBM I

<https://www.youtube.com/watch?v=BoWVPpp2IJo>

I need an RPG programmer

<https://www.youtube.com/watch?v=kuJdS3Rqgt4>

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Reach out to others – don't reinvent the wheel

Reach out – don't reinvent the wheel

- Reach out to others in the community
- Find out where others are finding resource
- Check local user group
- Attend conferences and events
- Reach out on blogs
- Converse with other organizations
- Research what is working



Final Thoughts



- **Modernize**

- Out of date may equate to difficulties to find resource
- Can't replace the world use modern tools for new projects

- **Frustrating to hear we can't find resource**

- Misconception students aren't interested
- Need to get your information out to reach potential resource
- This may not be using traditional methods
- Consider finding someone suited and mentor or train
- Plan ahead don't wait
- Consider interns

Final Thoughts



- **Intent to inform and enthuse**
- **There is optimism and solutions**
- **Please share**
- **Finding the next generation is extremely important to the future of the platform**
- **We've been fortunate to have great careers on IBM i and the next generation can and will realize the same experience**
- **The next generation is ready, waiting and eager**

Thanks

Best of luck on your search for the next generation
of resource.

Thank you!

QUESTIONS?

Hope this information helps you find resource.



Laura A. Ubelhor – Consultech Services, Inc.
lubelhor@consultechservicesinc.com