

Elva Lin, Ph.D.

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EDUCATIONAL PREPARATION

<u>Institution</u>	<u>Degree</u>	<u>Date</u>
John Hopkins University	Data Science Certificate via Coursera	08/2017
George Washington University	Master Certificate via Motorola University	05/2000
Arizona State University	PhD (Computer Information Systems)	06/1993
Arizona State University	MS (Computer Information Systems)	08/1988
Tamkang University	BBA (Business Management)	06/1984

PROFESSIONAL EXPERIENCE

<u>Corporation/Institution</u>	<u>Position</u>	<u>Date</u>
Inition Education Solution Chandler, AZ	Director, co-founder	04/2016 – present
General Dynamics C4 Systems, Scottsdale, AZ	Product Manager, Engineering Project Manager	10/2001 – 10/2007
Motorola, Inc. AZ	Program Manager, Technical Marketing Manager, CDMA Senior Software Engineer/Feature Development Leader	05/1995 – 10/2001
Yuan Ze Institut Technology, Taiwan	Visiting Associate Professor	09/1994 – 02/1995
VLSI Technology Inc., Tempe, AZ	Programmer Analyst	11/1993 – 09/1994
Bull HN Worldwide Information System, AZ	Software Engineer & ORACLE DBA	07/1989 – 12/1990

TEACHING EXPERIENCE

<u>Institution</u>	<u>Course</u>	<u>Date</u>
Arizona State University, Tempe, AZ 85287	Intro to Information System, Web Development, C# (UG) Business Database Systems, Applied Project (G)	08/2013 – 09/1994 – 02/1995
Yuan Ze Institut Technology, Taiwan	Computer Information System (UG, G) Data Base Management System (G)	
Arizona State University	C Language (UG, Teaching Assistant)	08/1988 – 05/1989

RESEARCH INTERESTS

Girls in STEM, Technology and Engineering curriculum design, Data analytics, subscript-Free Modeling Language, models and data integration in a decision support system; business information systems apps development and application, the pros and cons of small business operation with apps; extend social media influence over time; digital Darwinism.

CURRENT RESEARCHES

Girls in STEM (2016-): Investigation into underlying contributors of female students' decisions to pursue technology majors in college

Data Analytics (2015): Sports management data analytics with Python, Java, and RStudio

- Analyzed tennis player data which provided actionable insides on speed, acceleration, points, strength, positions, and load information to the coaches and players
- Work with students to parse video data file to csv files

PUBLICATIONS

Lin, S. E. (2005-2007). Reachback™ Voyager Multichannel Data and Voice Multiplexer and Reachback Inverse Multiplexer Training Manuals. *General Dynamics C4 Systems*.

Lin, S. E. (2005-2007). Reachback™ Voyager Multichannel Data and Voice Multiplexer and Reachback Inverse Multiplexer Data Sheets. *General Dynamics C4 Systems*.

Lin, S. E. (2005-2007). Reachback™ Voyager Multichannel Data and Voice Multiplexer and Reachback Inverse Multiplexer User Manuals. *General Dynamics C4 Systems*.

Lin, S. E. (2005). Global Broadband Solutions and Services Data Sheet. *General Dynamics C4 Systems*.

Lin, S. E. (2005). Global Netted Communications Brochure Data Sheet. *General Dynamics C4 Systems*.

Lin, S. E. (2005). SelectFocus™ Selectable ROI Image Compression Software Data Sheet. *General Dynamics C4 Systems*.

Lin, S. E., Schuff, D., and St. Louis, R. (2000). Subscript-Free Modeling Languages: A tool for facilitating the formulation and use of models, *European Journal of Operational Research, Volume 123, Issue 3, 16 June 2000*, 614 - 627.

Lin, S. E. (1999). IRIDIUM Gateway System Overview, *Product Sheet, Motorola*.

Lin, S. E. (1999). SR7 Enhanced Call Intercept New Features. Customer Technical Note CTN-E0010.MKT, *Motorola*.

- Lin, S. E. (1999). Operations and Maintenance Center for Message Origination Controller (OMC-M). *Customer Technical Note CTN-15.MKT, Motorola.*
- Lin, S. E. (1999). Call Intercept S-Record (Intercept Record) Layout for SR6. *Customer Technical Note CTN-E0011.MKT, Motorola.*
- Lin, S. E. (1998). Enhanced Call Intercept (ECI) External Protocol and Format. *Customer Advisory Bulletin 9, Motorola.*
- Lin, S. E. (1998). Enhanced Call Intercept (ECI) Physical Equipment Description and External Interfaces. *Customer Advisory Bulletin 7, Motorola.*
- Lin, S. E. (1998). IRIDIUM Cellular Roaming Service. *Customer Technical Note CTN-E0008.MKT, Rev. A, Motorola.*
- Ramirez, R. G. & Lin, S. E. (1993). Subscript-Free Indexing in a Mathematical Programming Language. *Proceedings of the 1993 Hawaii International Conference on System Sciences.*
- Lin, S. E. (1990). Distributed Operating Systems: An Overview. *Technical Update, Bull Systems Engineering.*

DISSERTATION

- Lin, S. E. (1993). Subscript-Free Modeling Language: An Improved Basis for Integrating Models and Data in a Decision Support System (Doctoral Dissertation, Arizona State University.)

INVITED TALKS AND PRESENTATIONS

- “Digital Darwinism,” *Scottsdale Leadership Academy*, Scottsdale, AZ. January 2017.
- “Digital Darwinism,” *Scottsdale Leadership Academy*, Scottsdale, AZ. November 2015.
- “Entrepreneurship,” *Enactus Non-Profit Organization, Arizona State University*, Tempe, AZ. September 2015.
- “Pitching your idea in 2 minutes,” *Hackathon Taiwan*, Taipei, Taiwan. July 2015.
- “Digital Darwinism,” *Scottsdale Leadership Academy*, Scottsdale, AZ. October 2014.

INFORMATION SYSTEMS CONSULTANT/MENTOR

- Venture Acceleration Teams. *Arizona State University*. (2015).
- ConSol4U, LLC. (October 2014 - 2016)
- Financial System Replacement Project. *Arizona State University*. (August 2014 – May 2015)

INDUSTRIAL EXPERIENCE

Inition Education Solution, Chandler, AZ (04/2016 –), CO-Founder and Director

- Partnering with State of Arizona representative and local k-12 schools to inspire more students, especially girls, to study STEM majors

- Offering technology and engineering programs at local elementary and middle schools where students work collaboratively to create a product or a solution for entertaining, improving processes, or fixing surrounding problems
- Providing take home minicomputers for students to use at home so students have tools for full potential
- Sponsored Tempe School District Tech Showcase event to introduce educational products
- Formed the student club inition@asu to get students' involvement in that more devices and programs can be delivered to local schools and refugee students worldwide. The long term goal is to launch Inition student club globally so more children can be served
- Worked with Karam Foundation to deliver educational tools, Raspberry Pi units, accessories, and mini robots, to refugee schools near Turkey and Syria border

Private Lecturer and care giver (2007- 2017)

- Provided care and home schooling education (high school general courses and college-level Computer Information System (CIS) courses, such as Database, Web Design, E-Commerce, Multi-media, Adobe, CSS/HTML) to a special-needs child

Business Consultant (2007 - 2010)

- Clients served: Chang Lien-Cheng Saxophone Museum, HungKuang University, and private sector in US and Taiwan
- Serviced as: financial adviser, product marketing/distribution, exhibit translator, cultural ambassador

GENERAL DYNAMICS C4 SYSTEMS, Scottsdale Arizona 2001 - 2007**Product and Engineering Project Manager**

- Products developed have been utilized to monitor weather condition in Alaska to prevent small jet crashes, to detect drug smuggling on the Caribbean Ocean, to transmit daily polar research data to mainland research center, and to patrol several countries' borders.
- Worked with team members to capture government contracts totaling more than US\$900M
- Developed and executed marketing programs, e.g., a set of sales and marketing collateral and tools, customer referral programs, hands-on product training, etc., to continue the rapid growth in the global market
- Coordinated more than 15 cross-functional teams, suppliers, and resellers to succeed 80% demo-to-sales, 90%+ on-time delivery, 20%+ of production costs reduction for 3 consecutive productions, and 80%+ 24x7 customer satisfaction
- Authored project and product road-map plans, white papers, proposals, brochures, requirements, specifications, analysis and design, test plans and procedures, user manuals, training documentations
- Managed entire software and hardware product life cycle, product launch, delivery, and deployment by executing project and product road-map plans
- Performed software analysis/design with design/use-case models and sequence/state diagrams

MOTOROLA INC., Scottsdale, Chandler, Tempe, Arizona 1995 - 2001

Progressed through multiple positions of increasing authority, including: CDMA Senior Software Engineer, Technical Marketing Manager, and Program Manager for introducing Wireless Technologies

- Led multiple disciplines and global teams to deliver ahead of schedule and under budget totaling US\$60M China and Taiwan Gateway projects
- Coordinated worldwide resources to finish the project on time, managed changes, understood technical issues, and ensured they got resolved in a timely manner while keeping the big picture and budget in focus
- Presented new products and features at the customer sites, product conferences, and trade shows
- Published Customer Technical Notes and Advisory for worldwide customers
- Provided hands on training, site system configuration, troubleshooting, and problem fixing
- Organized customer learning groups so the on-site multi-national team could utilize time efficiently in performing tasks, answering questions, and providing resolutions, which saved 2 to 3 weeks of deploying time, when compared to other sites
- Developed Mobility Manager System and features with Object-Maker Object-Oriented (OO) tool, UNIX/C++, INFORMIX Embedded SQL, and K-shell programming language

VLSI TECHNOLOGY INC., AZ (11/1993 – 9/1994). *IT Group Programmer Analyst*

IT Programmer Analyst

- Designed and implemented demand and sales booking forecast systems with Object-Oriented Analysis and Design tool and ORACLE Relational Data Base System.

BULL HN WORLDWIDE INFORMATION SYSTEMS, AZ (7/1989 – 12/1990).

Software Engineer and ORACLE DBA

- Designed and implemented the INGRES OPEN SQL and ORACLE Gateway
- ORACLE DBA and Provided technical support in using Pro*C, SQL *PLUS, and SQL *CALC

LANGUAGE SKILLS Native speaker Chinese (Mandarin)

CERTIFICATE Held former PMP (Project Management Professional) certificate

TECHNICAL SKILLS

- Microsoft® Office, Project, C, C++, C#, Visual Basic, SQL, html, CSS3, MySQL, PHP, Cognos, Tableau, SPSS Modeler, IBM Rational Team Center (RTC), R, Python
- Total Engineering Solutions
- Hardware/Software Design
- Productization and certification