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EDUCATIONAL HISTORY

Doctor of Philosophy (PhD) University of Florida

Gainesville, FL

Higher Education Administration, August 2014

Minor: Research and Evaluation Methodology (Assessment, Quantitative Statistics)

Master of Arts (MA) Ball State University

Muncie, IN

Teaching English as a Second Language, Master of Arts

Bachelor of Science (BS) Ball State University

Muncie, IN

Political Science, Bachelor of Science

Minor: Criminal Justice & Criminology

Certificates

IBM Blockchain Foundation for Developers (Coursera)

Certification Date Aug 2018 – Present License 49S3LZT7K9GC

University of Texas, **Big Data Analytics Certificate**, May 2018

Introduction to Big Data, Coursera, May 2016

EMPLOYMENT HISTORY

Director, Market and Product Development, Society for Manufacturing Engineering (SME) Nov 2022 – Present

- Labor Market Modeling for Skills Alignment for the Electrical Vehicle, Battery Production and Semiconductor industry.
- Product development for Workforce development management for three states and 5 large automotive companies
- Development of machine learning recommendation system for content curation.
- Deployment of Artificial Intelligence-Natural Language Processing solution for personalized career pathways.
- Virtual and Augmented Reality mobile app development for STEM career awareness.

Senior Director Corporate Content (Training) Strategy & Career Pathways, Wiley Beyond Feb 2021- Oct 2022

- Manage two state workforce development research aligning skills and education to careers.
- Manage content offerings for over 600,000 employees.
- Research and Design job architecture and skills repositories for over 60 healthcare and manufacturing clients.
- Sales solution architect for corporate and associations.
- Assisted in securing \$1.3 million in corporate and state contracts for research and talent development.
- Managed and developed Natural Language Processing process to delineate skills from content.
- Developed strategy to align program outcomes to skill clusters relevant to industry skills-based talent needs.
- Conduct large scale state labor and skills analysis for the state of Missouri for the Office of Workforce Development
- Ran labor data models for specific industry partners
- Developed and managed content library consisting of 57 training partners and over 1,200 content offerings
- Developed recommendation engine for skill-based content offerings for each corporate client.
- Managed content alignment for the Missouri Association of Manufacturers and their 200 corporate partners.

Chief Learning Officer and Data Scientist, *UPLEARN and EDGELEARN*

Dec. 2018-Jan 2021

- Developed three stackable certificates (9 Courses) for Artificial Intelligence and Machine Learning Training for workforce centers (e.g., Boeing) utilizing ADDIE and UX Design thinking strategies.
- Developed and Recruited industry-leaders as part of a global fellowship (40) in Artificial Intelligence to serve as content developers, instructors, and consultants.
- Secured contracts with 10 community colleges for AI training and two secondary schools for AI course program.
- Increased revenues by 150% in 14 months through industry and college contracts.
- Developed Reinforcement Learning mockup for Fire Egress for commercial buildings.
- Developed LMS Development for AI Training.
- Created customized training for the National Council for Continuing Education and Training (NCCET) workforce centers for 184 potential colleges.
- Developing **WIFI-finger printing model** to assist client in developing a navigation system for large interior industrial spaces. **Analyzing over 2.9 million data points with CARET Package in R.**
- Conducted cell phone sentiment analysis to determine future customer preferences of specific brand cell phone components. Utilized AWS data with Electronic MapReduce and SVM (Accuracy- 96%) to potentially **increase revenue in adjusting such components as camera function and display.**
- Developed and implemented **Decision Tree model utilizing RapidMiner** for Customer Buying Patterns based upon region, point of purchase, number of items purchased, and customer demographics from 80,000 purchases for an e-commerce electronics company. With an accuracy rate of 80%, regional marketing recommendations were provided to potentially **increase online purchasing by 42%.**
- Developed **Random Forrest predictive model for new product profitability** utilizing logistical regression (accuracy rate-81%) in RapidMiner to determine key variables in product success and real-time transactions of 100,000 purchases for an e-commerce electronics company.
- Investigated customer brand loyalty for computer purchases to determine future inventory of brands. Utilized KNN model in R to gain **an accuracy rate of 65%** and **reduce costs of excess inventory.**
- Predicted customer brand loyalty for top 5 new product developments for electronic utilizing **Gradient Boosted Tree method** for an e-commerce electronics company with an accuracy rate of 83.5%.
- Conducted **market basket analysis** utilizing **Apriori Algorithm from AWS data with Python** to analyze product associations and develop recommendation rules in order to analyze possible acquisition of electronics competitor by analyzing 1000 monthly purchase. **Predicted product alignment in making decision not to acquire competitor**

Director of Research & Partnerships, *BLDG-25, INC.*

April 2019 – April 2020

- Secured contract for \$100,000 for incorporating gamification into Tech Nest program (Internet of Things Course) at San Jose Evergreen Community College District.
- Served as account management for 11 different higher education institutions and secured \$250,000 in projects.
- Developed partnerships with National Council of Instructional Administrators their 75 community colleges members.
- Lead team on the gamification of Internet of Things course on EdX Platform for San Jose City College utilizing ADDIE and UX Design thinking strategies.
- Designed and researched learner effectiveness utilizing virtual reality and gamification for two large universities and increased student retention by 60% and 55% respectively.
- Designed and researched an experimental design learning experience for 50 IOT students to determine effectiveness of game-based instruction and assessment.
- Conducted research on use of design thinking and sprint in the development of educational content for three colleges,
- Conducted research on learning outcomes through gamification and AR/VR for University of North Carolina's Center for Health Informatics Program (CHIP).

Research and Statistical Consultant, *Excalibur Education*

February 2017-Present

- **79 Plus Initiative**, conducted mixed method analysis of students who had 79 credits (enough for an Associate degree) and no credential and offered recommendation for tracking and retention. Funder- San Jose City College.
- Understanding the Effectiveness of Micro credential for 21st Century Mobility Skill, served a grant evaluator for mixed method analysis for micro-credential pilot at Central New Mexico Community College, San Jose State University, and University of Maine System. Organization- Ed Design Labs, Funder.

Executive Director, Bellwether College Consortium

Aug. 2015-June 2019

Alamo Colleges & University of Florida Institute of Higher Education

- Grew membership from two colleges to 70 colleges in three years.
- Increased revenue from \$20,000 to \$350,000 in membership fees, \$150,000 in consultant fees, and \$50,000 in non-member services.
- Secured \$100,000 in grant funding for research and program evaluation.

- Reviewed and evaluated over 800 best practices at community colleges in the area of workforce, instructional programs, and planning, governance, and finance.
- Scaled 50 different college programs to over 100 different institutions.
- Managed 10-15 independent researchers and three full-time staff.
- Mentored 10 doctoral students in research and publications production.
- Served as research lead for 8 state and national research projects including predictive modeling for student success, reverse transfer of credit, workforce modeling, and non-credit certificates and employment opportunities.
- Established a national Applied Research Center for Workforce Development.
- Conducted monthly webinars with college partners (55 average number of attendees).
- Developed Random Forrest predictive model for determining at-risk undergraduate students at Alamo Academics and provided specific interventions to assist in student retention. **Obtained 92% Accuracy and increased retention rates by 25%.**
- Developed and implemented Predictive model utilizing **Support Vector Machine** model to assist in workforce training courses for San Antonio 2020 initiative with model accuracy of 72% and **save resources (\$250,000) on developing tailored workforce programs for future job market.**

Chief Executive Officer, ImEpik, LLC.

Aug.2014- August 2016

- Managed budget of \$750,000.
- Account management and sales plan led to training in 5,000 safety facilities and total revenue \$3,250,000.
- Manage executive team of two (CFO, Vice-President), three commission sales staff (3 different states), and three software developers.
- Conduct instructional design (developed competencies, learning outcomes, assessments, storyboarding) for food safety training (Food Safety Modernization Act).
- Negotiated and secured venture capitalist funding of on-line training software development (\$404,000).
- Served as project manager for online digital literacy and food safety training software.
- Developed and implemented data analytics plan for online training.
- Worked in Learning Management Design for analytics using xAPI.

Senior Policy Consultant, University of Florida, Institute of Higher Education

Aug.2014-Jan 2020

- Consulted National Student Clearinghouse on how to effectively train for external access and statistical manipulation of database (Authorized Research Entities Initiative).
- Conducted policy research on reverse transfer implementation model in coordination with the National Student Clearinghouse (NSC) (2015 and 2016).
- Strategically advise further implementation of applied research centers (Instructional Programs & Workforce Development).

Program Director University of Florida, Community College Futures Assembly, Institute of Higher Education Aug. 2011-Aug. 2014

- Developed strategic marketing plan (website design, social media, print) to expand membership and application pool.
- Organized annual convention of 300 community college presidents, administrators, CEOs, and board of trustee members.
- Managed an annual budget of over \$200,000.
- Supervised team of 4 students working in research, communication, and marketing.
- Developed and scaled consortium of community colleges to promote best practices among institutions (Bellwether College Consortium).
- Assisted in securing sponsorship funding of over \$30,000.
- Developed and promoted national workshops of Bellwether winning programs (e.g., Do the MATH! Cleveland Community College, TN).
- Conducted applied research on program effectiveness in the areas of teaching and learning and workforce development.
- Served as liaison for Futures Assembly with national affiliate organizations (ACCT, AACC, NCIA, NCCET, CRD).
- Assisted in program development of a community college math and student affairs master's degree program.
- Organized judging of over 400 competing community college programs.

International Marketing & Partnerships Director University of Central Florida

Aug. 2006 – May 2010

- Developed and managed 60 different partnerships with 40 international universities and businesses.
- Increased international student enrollment by 30% to encompass 2% of total student population.
- Handled and dispersed marketing budget of \$50,000.
- Supervised a staff of four and two graduate student assistant
- Identified, developed, and evaluated marketing strategy, based on knowledge of establishment objectives, market characteristics, and cost and budgetary factors.

- Developed and implemented international marketing plan including rebranding, website design, social media outreach, and print material.
- Formulated, directed and coordinated marketing activities and programs to promote educational services at UCF.

PROGRAM & COURSE DEVELOPMENT

- Business English Program – University of Central Florida
- Accent Reduction – University of Central Florida
- Community College Student Affairs – Masters – University of Florida
- Resource Development – Doctorate – University of Florida
- Data Analytics – Alamo Colleges
- Artificial Intelligence and Machine Learning Training – Polk State College, Dallas College, Kennesaw State University

GRADUATE & WORKFORCE TRAINING COURSES – ONLINE (Utilize ADDIE, UX Design Strategy & Situated Learning Models)

- Big Data Analytics – University of Texas Austin – School of Professional Studies
- Applied Machine Learning – St. Louis University Workforce Center
- Applied Machine Learning – Polk State College

UNDERGRADUATE COURSES (INSTRUCTOR) Face to Face/Online

<u>Courses</u>	<u>Thematic Focus</u>
Business Writing	Business English Program
Business Presentations	Business English Program
Second Language Acquisition	Teaching English as a Second Language Program
English Grammar	Teaching English as a Second Language Program
English Composition	Teaching English as a Second Language Program
Intercultural Communications	Teaching English as a Second Language Program

FUNDED RESEARCH GRANT PARTICIPANT

RESEARCH GRANT	FUNDING AGENCY	GRANT FUNDS
Wilson, T. and Wilson, Wes (2019). Micro credentials and Badging and Employment.	Lumina Foundation	\$1,250,000
Ponjuan, L., Clark, M.A., & Wilson, T. (2010-2012). Boys in Peril: Examining Latino boys' educational pathways and motivation towards postsecondary education	TG Foundation's Public Benefit Grant Program	\$250,000
Ponjuan, L., Wilson, T. (2010). STEM Mentoring	Howard Hughes Medical Institute	\$50,000

Language: Spanish (Conversational), Portuguese (Beginner)

Machine Learning: TensorFlow, Python, Julia

Learning Management System: Moodle, Blackboard, Sakai, Canvas, xAPI

Instructional Design: Adobe Captivate, DominKnow

Computer Skills: Dreamweaver, WordPress, SEVIS, Peoplesoft, MS Office (Excel, Access), PowerPoint, Publisher, Film & Video (After Effects), Zoho CRM, SCORM, and xAPI

Data Analysis: Big Data Fundamentals Course, Hadoop Training, RapidMiner, SQL, Python, TensorFlow, PostgreSQL, PyTorch, Tableau.

Statistical Software: SAS, SPSS, IRT Lab, M Plus, R, Python