

TEXAS STATE VITA

Please note: For all entries, list most recent items first. Headings without entries may be eliminated, but the heading lettering/numbering should remain consistent with this template.

I. Academic/Professional Background

A. Name: Mark W. Welker

Title: Lecturer

B. Educational Background

| <i>Degree</i> | <i>Year</i> | <i>University</i> | <i>Major</i> | <i>Thesis/Dissertation</i> |
|---------------|-------------|----------------------------------|-------------------------|--|
| PhD | Pred-2025 | Texas State University | Developmental Education | Literature Utilization: Information retention of Senior Electrical Engineering students from Freshman and Sophomore level Electrical Engineering courses |
| MBA | 2011 | Florida International University | IT business management | |
| MSEE | 2002 | University of Texas at Austin | Computer Engineering | Thesis: "Improving the Human Computer Interface, a replacement for the Keyboard and Mouse" |
| BSEE | 1987 | Florida International University | Computer Engineering | |

C. University Experience

| <i>Position</i> | <i>University</i> | <i>Dates</i> |
|-----------------|-------------------------------|----------------|
| Lecturer | Texas State University | 2018 - Present |
| Adjunct | University of Texas at Austin | 2006 - 2008 |

D. Relevant Professional Experience

| <i>Position</i> | <i>Entity</i> | <i>Dates</i> |
|------------------------------------|--------------------|--------------|
| Director, Performance and Analysis | Flex international | 2015-2018 |

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|--|-----------------------------|-----------|
| Director, Performance and Analysis | Dell, Inc., | 2009-2015 |
| Senior Member Technical Staff, Client Analysis Manager | Advanced Micro Devices | 1999-2009 |
| Senior Member Technical Staff Research and Development | Compaq Computer Corporation | 1990-1999 |

E. Other Professional Credentials (licensure, certification, etc.)

| Patent Number | Description |
|----------------|---|
| 10,031,916 | Methods and Systems for virtualizing and managing cloud storage |
| 10,013,228 | System and Method for positioning an application window base... |
| 9,779,089 | Auto-Storing and synchronizing device content from an information handling system |
| 9,619,299 | Synchronization using device pairings with docking stations |
| 9,524,139 | Positioning an application window based on usage context for dual screen display device |
| 9,224,133 | Establishing interpersonal communication and system |
| 6,686,913 | Analog Conditioning circuitry or imagers for a display |
| 6,570,546 | Video Display Configuration Detector |
| 6,525,733 | Video Graphics Controller with High speed Line draw processor |
| 6,323,854 | Multi-tile video display system with distributed CRTC |
| 6,308,248 | Method and System for allocating memory space using mapping controller... |
| 6,300,945 | Analog conditioning circuitry for imagers for a display |
| 6,076,139 | Multi-media computer architecture with multi-channel concurrent memory access |
| 6,037,951 | Video graphics controller with improved calculation capabilities |
| 5,892,929 | Avoiding non-unique identifiers for bus devices |
| 5,416,897 | Video graphics controller with selectable pattern features for line draws. |
| 5,517,646 | Expansion device configuration system having two configurations... |
| 5,613,054 | Video graphics controller with improved calculation capabilities |
| 5,613,053 | Video graphics controller with automatic starting for line draws |
| 5,598,579 | System for transferring data between two buses ... |
| 5,812,876 | DMA controller, which can be controlled by Host and Local Processors |
| US 20160125777 | A1 Image Sticking Prevention Using an Information Handling System Webcam |

| | |
|-----------------|--|
| US 20150348460 | A1 Method and system for monitor brightness control using an ambient light sensor on a mobile device |
| US 20150373101 | A1 Methods and systems for synchronizing data between two geographically disparate locations |
| US 20150373109 | A1 Methods and systems for virtualizing and managing cloud storage sources |
| CA 2127369 | Video graphics controller with improved pattern capabilities |
| 5,978,858 | Packet protocol and distributed burst engine |
| 6,128,669 | System having a bridge with distributed burst engine to decouple input/output task from a processor |
| US9990242B2 | System and method for synchronization using device pairings with docking stations |
| US9921644B2 | Information handling system non-linear user interface |
| US20160011754A1 | Method and system for virtualized sensors in a multi-sensor environment |
| US9779089B2 | Auto-storing and synchronizing device content from an information handling system |

II. TEACHING

A. Teaching Honors and Awards:

University of Texas Teaching award of Honor: In recognition of exemplary service during the Covid-19 crisis in Spring 2020

B. Courses Taught:

| | |
|-------------------------------|--|
| University of Texas at Austin | EE 319k Introduction to Embedded Systems |
| Texas State University | EE 2420 - DIGITAL LOGIC |
| | EE 3420 - MICROPROCESSORS |
| | EE 4321 - DIG SYS DES U HDL |
| | EE 4352 - INTRO TO VLSI DES |
| | EE 4390 - EE DESIGN I |
| | EE 4391 - EE DESIGN II |

D. Courses Prepared and Curriculum Development:

| | |
|------------------------|--|
| Texas State University | EE 4321 – Digital Systems Design Using HDL |
| Texas State University | EE 3420 Microprocessors |

III. SCHOLARLY/CREATIVE

B. Works Not in Print:

1. Papers Presented at Professional Meetings:

Lawson, C. A., Lollar, J. E., Segovia, J. W., Taylor, M. Z., Killingbeck, M. D., Welker, M. W., Acee, T. W., Hodges, R. B., "Characteristics of Texas' Learning Frameworks courses: Honoring the Past, navigating the present, and imagining the future," Paper presented at the annual meeting of the College Academic Support Programs. Hosted virtually. (October 2021).

Welker, M. W., CASP 2021, "Characteristics of Texas' Learning Frameworks Courses: Honoring the Past, Navigating the Present, and Imagining the Future," CASP TX, Online, TX, United States. (October 18, 2021).

[CASP_Attendance-1.png](#)

Holschuh, J. P. (Principle Contributor/presenter), Welker, M. W. (Contributor /Presenter), Holschuh, D. R. (Contributor / Presenter), Bowers-Johnson, K. M.(Contributor / Presenter), Lawrence-Wallquist, A. C. (Contributor / Presenter),Gamage, D. A. (Contributor / Presenter), Mahdaviand Fard, S. (Contributor /Presenter), CRLA 2023, "Out with the old: Making Space for IntentionalUnlearning," College Reading and Learning Association, Hilton Baltimore InnerHarbor, Baltimore, MD, United States. (November 10, 2023).

[CRLA_Conference_Sessions_2023-1.pdf](#)

Welker, M. W. (Contributor/ presenter), Regalado, Y. M. (Contributor/ presenter),Summers, E. J. (Principle Contributor/ presenter), CRLA 2023, "The power of intent: Supplemental Instruction STEM and Diversity Inclusion.," College Reading and Learning Association, Hilton Baltimore Inner Harbor, Baltimore, MD, United States. (November 9, 2023).

5. Other Works not in Print:

b. Works "in progress":

Journal Articles:

Acee, T., Hodges, R. B., Segovia, J. W., Lollar, J. E., Taylor, M. Z., Welker, M. W., ... Killingbeck, M. D. (In Preparation; Not Yet Submitted). Characteristics of Learning Frameworks Courses at Texas Public 4-Year Institutions.

IV. SERVICE

C. Community:

Habitat for humanity: building houses: 20 hours each year 2009-2015

GoodWill : Worked in Personal computing recover 24 hours a year 1999 – 2009

Updated 6/2012