

# AMY WILSON HAYS

## EDUCATION

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- PhD** Texas A&M University, Commerce, Educational Psychology 2026  
Thesis: Posture and Cognitive Control  
Advisor: Dr. Shulan Lu  
GPA: 4.0
- MS** Texas A&M University, Commerce, Computer Science August 2021  
Thesis: Methods of Neural Network Analysis to Identify Weapons in Augmented Reality.  
Advisor: Dr. Derek Harter  
GPA: 4.0
- BS** University of California, Davis, Double Major June 1995  
International Agricultural Development  
And Botany

## RESEARCH EXPERIENCE

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- Texas A&M University, Commerce, TX** 2020 to 2021  
**Presidential Graduate Assistant Researcher**, Dr. Sang Suh
- Researched and publishing a paper on the “Impact of US State Public Health Interventions on Mental Health during the COVID-19 Pandemic.”
  - Research and assisted writing an Research Experience for Undergraduates Grant for the NSF
- Cornell University, Ithaca, NY** 1995 to 1997  
**MPS Thesis**, Advisor: Dr. Daniel J. Tennesen
- Research, wrote and defended Master’s Thesis.
  - Built and apparatus to measure plant growth down to the nm using Linear Voltage Differential Transducers, a data acquisition board and an IBM PC.
  - Collected and converted the analog signals to digital signals to be converted to usable data to be analyzed.
- University of California, Davis, CA** 1994 to 1995  
**Undergraduate Student Researcher**, Dr. Alan B Bennett
- DNA Isolations, PCR Reactions, Gel Electrophoresis, and RFLP Mapping.
  - Assisted Ph.D. students with their tomato genetics research thesis projects.
- University of California, Davis, CA** 1993 to 1994  
**Undergraduate Student Researcher**, C.M. Rick Tomato Genetics Resource Center

- Cultivated and cross-pollinated tomato plants.
- Recorded and organized tomato plant varieties in the lab database.

**Hunt-Wesson, Inc, Davis, CA** 1992 to 1995

**Agriculture Research Lab Computer Specialist, Dr. Thomas C. Garvey**

- Biotech Project Management Internship.
- Designed and wrote programs for all Hunt-Wesson's Ag Research labs to analyze tomato processing data.

## TEACHING EXPERIENCE

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**Texas A&M University, Commerce TX** January 2020 to Aug 2021

**Graduate Teaching Assistant, Computer Science**

- Supervise Network Computer Lab
- Grade assignments and update Online class grading system for:
  - CSCI 430 Operating Systems
  - CSCI 352 Intro to Digital Forensics
  - CSCI 440 Application Software Project Development (2 Sections)
  - CSCI 515 Fundamentals Of Programming C/C++
  - COSC 1436 Introduction to Computing
  - COSC 1437 Programming Fundamentals II
- Average class size is 45 Students
- Assist students with their computer science programming questions for Python and C++, and Assembly Language.

**Cornell University, Ithaca, NY** August 1995 to May 1997

**Graduate Teaching Assistant, Plant Biology**

- Introduction to Plant Biology
  - Conducted undergraduate laboratory courses averaging 25 students per semester.
  - Graded assignments.
  - Assisted students.

## PUBLICATIONS AND CONFERENCE PRESENTATIONS

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**2021 International Conference on Future Intelligent Computing (ICFIC 2021)**

Daegu University (Hybrid Online/Offline Conference) November 18-19, 2021

Title: Linear Regression Analysis of the Impact of COVID-19 Pandemic Health

Interventions on Mental Health in the United States.

## PROFESSIONAL EXPERIENCE

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**Telecom Capacity & Performance Planner, 2007 – 2015**

Charles Schwab & Co., Plano, TX.

**Coppell Print Facility - IT Field Support Analyst, 2004 – 2007**

Charles Schwab & Co., Coppel, TX.

**National Service Desk - Helpdesk Support Analyst**, 1999 – 2004

Charles Schwab & CO., San Francisco, CA

**Desktop Field Support Analyst**, 1998-1999

North American Mortgage Company, Santa Rosa, CA

**Lab Tech**, 1997

La Crema Winery, Windsor, CA

**Agriculture Research Lab Computer Specialist**, 1992-1995

Hunt-Wesson, Inc, Davis, CA

## COMPUTER SKILLS

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**Programming:** Python, Numpy, Scikit-Learn, Tensorflow, Pandas, C / C++, Assembly Language, Data Structures, Algorithms, Automata, SQL, HTML, CSS, JavaScript, ActionScript, JSON, XML, R, SAS, Bash

**Applications:** Microsoft Word, PowerPoint, Excel, Outlook, Access, SharePoint, Teams, GitHub, Visual Studio, Vim, Visual Studio Code, Oracle Virtual Box, Anaconda, Jupyter Notebooks, Tableau, SAS, R, R Studio, Adobe Photoshop, Gimp, My SQL, Oracle, Apache, XAMPP, MinGW, ATOM, git, WordPress

**Platforms:** Microsoft Windows, Linux, Unix, Raspberry Pi, Android, Kali Linux

## PROFESSIONAL TRAINING

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**Exploratory Data Analysis**, Johns Hopkins University, Coursera, 2014

**Getting and Cleaning Data**, Johns Hopkins University, Coursera, 2014

**R Programming**, Johns Hopkins University, Coursera, 2014

**Data Scientist's Toolbox**, Johns Hopkins University, Coursera, 2014

## PROFESSIONAL AFFILIATIONS

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Association for Computing Machinery (ACM), 2019-Present

Student member - <http://member.acm.org/~amyhays>

ACM Special Interest Group on Accessible Computing, 2019-Present

Student member

ACM Special Interest Group on High Performance Computing, 2020-Present

Student member

IEEE, 2020

Graduate Student Member

IEEE Computational Intelligence Society Membership, 2020

Graduate Student Member

IEEE Computer Society Membership, 2020

Graduate Student Member

IEEE Women in Engineering Membership, 2020

Graduate Student Member

## HONORS AND AWARDS

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**Student Government Senator of the Year Award** 2021

Texas A&M University, Commerce, TX

**SGA Rising to the Challenge Award** 2021

Conference on Student Government Associations (COSGA)

**Change Maker Service Award Nominee** 2021

Texas A&M University, Commerce, TX

**Distinguished Graduate Student Award Nominee** 2021

Texas A&M University, Commerce, TX



THE HONOR SOCIETY OF  
**PHI KAPPA PHI**

2020, 2021

Texas A&M University, Commerce, TX

**Distinction in Professional Development, Gold-Level** 2020

Texas A&M University, Commerce, TX

**Global Learner** 2020

Texas A&M University, Commerce, TX

**Employee of the Month Award** 2001, 2002, 2003, 2004

National Service Desk, Charles Schwab, San Francisco, CA

**The Charles Hess Community Service Award** 1995

University Of California, Davis

Award given at graduation by the College of Agriculture and Environmental Sciences.

## COMMUNITY SERVICE

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**Student Government Association, Texas A&M University**

Graduate School Academic Senator, Commerce, TX, 2021 - 2022

College of Science and Engineering Academic Senator, Commerce, TX, 2020 - 2021

**Society for Design and Process Science, Texas A&M University**

President, Commerce, TX, 2020 - Present

**Cancer Support Group Student Organization, Texas A&M University**

President and Founder, Commerce, TX, 2019 - Present

**Disability Resource Center, Texas A&M University**

Peer Mentor, Commerce, TX, 2019 - Present

**Sulphur Springs Veteran's Day Parade Committee**

Volunteer, Sulphur Springs, TX, 2017 - 2019

**Community Seeds**

Volunteer, Lone Oak, TX, 2017 - 2019

**Dean's Student Advisory Council, College of Agriculture and Environmental Sciences,  
University of California**

President, Davis, CA, 1993 – 1995

**Executive Committee, College of Agriculture and Environmental Sciences, University  
of California**

Non-voting Student Member, Davis, CA, 1993-1995

## LANGUAGES

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**English:** Native Language

**Spanish:** Novice Listener/Speaker