

AMY WILSON HAYS

Amy.Hays@tamuc.edu

EDUCATION

- PhD** Texas A&M University, Computer Science 2027
Thesis: Cyberpsychology and Cybersecurity
Advisor: Dr. Nitesh Saxena
- 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

- Texas A&M University, Commerce, TX** 2020 to 2021
Presidential Graduate Assistant Researcher, Dr. Sang Suh
- Article title: "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

RELLIS, Bryan, TX August 2023 to Present
Instructor, Department of Computer Science

- Lecture, grade, and design course materials for:
 - CSCI 233 Application Program Development
 - CSCI 303 Technical Communications for Computing Professionals
- Average class size is 10 Students.

Texas A&M University, Commerce TX January 2022 to Present
Instructor, Department of Computer Science

- Lecture, grade, and design course materials for:
 - CSCI 351 Foundations of Information Security
 - CSCI 352 Digital Forensics
 - CSCI 359 Systems Analysis and Design
 - CSCI 434 Introduction to Computer Networks
 - CSCI 497 Enterprise Architecture
 - COSC 2336 Data Structures and Algorithms
 - COSC 1436 Introduction to Computer Science and Programming
 - COSC 1437 Programming Fundamentals II
- Average class size is 25 Students.

Texas A&M University, Commerce TX January 2020 to Aug 2020
Graduate Teaching Assistant, Department of 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
 - CSCI 515 Fundamentals Of Programming C/C++
 - COSC 1436 Introduction to Computer Science and Programming
 - 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

2021 International Conference on Future Intelligent Computing (ICFIC 2021)

Daegu University (Hybrid Online/Offline Conference) November 18-19, 2021
([ICFIC – International Conference on Future Intelligent Computing \(daegu.ac.kr\)](https://www.daegu.ac.kr/ICFIC))

Title: Linear Regression Analysis of the Impact of COVID-19 Pandemic Health Interventions on Mental Health in the United States.

PROFESSIONAL EXPERIENCE

Telecom Capacity & Performance Planner, 2007 – 2015

Charles Schwab & Co., Plano, TX.

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

Charles Schwab & Co., Coppell, 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

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

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

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

IEEE Education Society Membership 2022
Graduate Student Member

HONORS AND AWARDS

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 to Present

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

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 - 2021

Cancer Support Group Student Organization, Texas A&M University
President and Founder, Commerce, TX, 2019 - 2021

Disability Resource Center, Texas A&M University
Peer Mentor, Commerce, TX, 2019 - 2021

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

English: Native Language

Spanish: Novice Listener/Speaker
