

Curriculum Vitae: Michael Spiess

Education

1997-2003 U.C. Davis / CSU, Fresno
■ Ed.D. Degree (Joint Doctoral Program in Educational Leadership), May 2003.

1981-1883 California State University, Fresno
■ M.S. Degree (Agriculture, Plant Science), December 1983.

1977-1979 California State University, Chico
■ B.S. Degree (Agriculture Major, with distinction), December 1979.

1975-1977 San Joaquin Delta College
■ A.A. Degree (Natural Resources Major, with high honors), December 1977.

Experience

Fall 2003-Present California State University, Chico
Associate Professor
Teaching agricultural engineering technology, irrigation, and agricultural education

Fall 1997-Spring 2003 California State University, Fresno
Lecturer
Teaching mechanized agricultural, precision agriculture, computer skills and agricultural education resources

July 1999-July 2003 California State University, Fresno
Manager, Agricultural Technology Information Network (ATI-Net)
ATI-Net is an administrative division of the California Agricultural Technology Institute which develops Internet based applications.

1997-Present Peak Consulting
Owner
■ Developing web sites and Internet applications for businesses and education.

1991-1997 FAMOUS, LLC
Partner
■ FAMOUS, LLC is the developer of the FAMOUS Agricultural Accounting package installed at 1500 sites in over 35 states (as of 1997).
■ FAMOUS is used by growers, packer-shippers, brokers, and wholesalers of produce.

1984-1997 FAMOUS, LLC
Product Manager/Customer Training and Support
■ Developed curriculum for customer classes.
■ Designed software changes. Planned special projects like integration of automatic faxing into FAMOUS and bar coded pallet/receiving tag systems.
■ Developed and maintained the company web site and coordinated all company Internet services.
■ Trained customers in the use of the FAMOUS accounting system. Job required

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advanced knowledge of the PC, Network, and UNIX operating systems and accounting skills

- Developed support staff training curriculum

1981-1988 California State University, Fresno

Lecturer (Part-time)

- Taught Agricultural Shop Skills, Rural Electrification, Tractors, Welding, Fabrication, Agricultural Computing, Irrigation System Design, and Surveying.

1981-1984 CSU, Fresno / Center for Irrigation Technology

Research Assistant

- Developed computer data acquisition and control systems. Performed irrigation equipment testing, system design, and programming.

1980-1981 Sierra Joint Union High School

Vo-Ag Instructor

- Grades 9-12, Taught Agricultural mechanics and crops.

1979-1980 Biggs Junior/Senior High School

Vo-Ag Instructor

- Grades 7-12. Taught Agricultural mechanics, woodshop, and construction (R.O.P.) Position involved planning and development of a new school farm.
- F.F.A. co-advisor.

Courses Taught

Curriculum & Methods in Teaching Agricultural Mechanics

Agricultural Machine Systems

Irrigation

Introduction to Agricultural Mechanics

GPS/GIS in Ag and Natural Resource Management

Directed Work Experience in Field and Row Crops

Introduction to Precision Agriculture

Introduction to Precision Agriculture for Community College Instructors and Ag Industry (web based with Rollin Strohman and Shrini Upadhyaya)

Introduction to Agricultural Mechanics

Agricultural Tractors

Agricultural Education Resources and Computer Applications

Equipment Operation Safety

Metallurgical Processes

Micro-Computer Applications to Agricultural Business (web enhanced)

Grants, Research, Publications, and Presentations

Spiess, M. 2006. Career Development Event Tabulations Program 2.0: Flexibility is the Key to Success. (peer reviewed poster) Boise, ID.

Reid, K., Spiess, M. 2006. Effects of Student Participation in Agricultural Education on Standardized Testing Scores. (peer reviewed poster) Boise, ID.

Spiess, M., Horney, M. 2005. Evaluation of ERSAR Plant Spectral Analysis Procedure for Sub-Watershed scale mapping of the exotic invasive weed, Arundo donax. (\$190,000) Funded by ARI and Glen County RCD (CalFed).

Spiess, M. Nelson, C. 2005 Sacramento Valley Water Management GIS (\$50,000). This ARI project with matching funds from a Bureau of Reclamation Water Conservation Grant will develop and test model GIS systems for water districts.

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- Spiess, M. 2005. Got Data? Using Online Surveys to Collect Teacher Data. (peer reviewed poster) Prescott, AZ.
- Spiess, M. Owen, J. 2005. Agriculture Teacher Use of the CalAgEd.org Website (peer reviewed poster) Prescott, AZ.
- Spiess, M. 2004. Farm Worker Transportation Safety grant (ARI) to develop web based materials. (\$20,000) This grant is in cooperation with CSU, Fresno Center for Agricultural Business and is part of an (\$500,000) project to improve transportation safety for farm workers in California.
- Spiess, M. 2004. Bureau of Reclamation Water Conservation Grant (\$300,000) to expand existing SCADA demonstration facilities and outreach activities to the North State water districts.
- Arthur, J., Varahamurti, R, Spiess, M. 2004. Autonomous Farming Using Intelligent Ground Vehicles (ARI). The grant is to research the feasibility of fully autonomous vehicles for use in precision farming. (\$90,000)
- Spiess, M. 2004. Continued funding of CalAgEd web site. \$12,000
- Trexler, C., Spiess M. 2004. California and Its New Teachers: Prisms Through Which to View the Future of Agricultural Education, 2004. National Agricultural Education Research Conference (NAERC), St. Louis, MO.
- Spiess, M. 2004. Online Program Planning for Students and Advisors. American Association of Agricultural Educators. Honolulu, HI. (peer reviewed poster)
- Cassel, S, Zoldoske, D, Spiess, M. 2003. Assessing Spatial and Temporal Variability of Soil Salinity of Farms Implementing Drainage Management Practices. California Agricultural Technology Institute. Funded by the California Department of Water Resources.
- Spiess, M. 2003-2005. Development of CDE tabulations programs for California state finals. \$20,000.
- Spiess, M. 2003. Continued funding of CalAgEd web site. \$15,000
- Spiess, M. 2003. A Pilot Study of Student Use of Course Web Sites in a Web Course Delivery System. JDPEL Research Symposium. Fresno, CA. (invited)
- Spiess, M. 2003. Online Data Collection of Secondary Agricultural Education Data. Central California Research Symposium. Fresno, CA.
- Spiess, M. 2003. Collecting FFA Roster and Teacher Demographic Data On-line. American Association of Agricultural Educators. Portland, OR. (peer reviewed poster)
- Spiess, M., Moffit, K. 2003. GIS for Faculty and Student Research. Presented to the annual CETL Conference at California State University, Fresno.
- Spiess, M., Rocca, S. 2003. Developing an On-line Student Portfolio System. NAREC. Las Vegas, NV. (invited)
- Spiess, M. 2002. Grant from CATA to develop Access based FFA contest tabulations programs that will support bar coded contest materials. \$10,000 (2002-2003)
- Spiess, M. 2002. Grant from Tech-Prep to develop on-line portfolio system for California secondary and community college agriculture programs. \$7500 (2002-2003)
- Spiess, M. 2002. Grant from Tech-Prep to develop on-line testing system for subject area tests to be used in secondary agriculture programs. \$7500 (2002-2003)
- Spiess, M. 2002. Development and presentation of a GIS Unit for the Central Valley Science Leadership Institute (Fresno). Included CD-ROM based exercises and sample data for K-12 teachers.
- Spiess, M., Rocca, S. 2002. Developing an On-line Student Portfolio System. Western Region AAAE. Spokane, Washington.
- Spiess, M., Rocca, S. 2001. Developing an On-line Student Portfolio System. Western Teaching Symposium. Honolulu, HI.
- Spiess, M. 2001. Using Remote Sensing for Crop Management. Presented at GIS

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Day, California State University Fresno.

Spiess, M. 2001. Developing an On-line Student Portfolio System. JDPEL Symposium. Fresno, CA.

Spiess, M., Rocca, S. 2001. Developing an On-line Student Portfolio System. Central California Conference on Assessing Student Learning. Fresno, CA.

Spiess, M. 2001. Computer Use by California Agricultural Teachers. California Agricultural Technology Institute, Fresno, CA. Spring 2001. CATI Publication #010501

Spiess, M. 2001. Computer Use by California Agricultural Teachers. American Association for Agricultural Education Conference. Carmel, CA

Spiess, M. 2001. Searching the Web for Ag Safety Materials and Using the CalAgSafety Web Site. Ag Safe Conference. San Luis Obispo, CA

Hanna, M. Spiess, M. 2001 Developing an On-line Centralized Childcare Eligibility List for Fresno County. State grant in cooperation with Fresno County (\$116,000). 2001-2003

Spiess, M. 2000. Using GIS in Precision Agriculture. Presented at GIS Day, California State University Fresno.

Spiess, M. 2000. ACTION - Developing a Secure On-line Agricultural Crime Tracking System with Real-Time GIS Analysis. Grant from Tulare County (\$90,000)

Spiess, M. 2000. Development of an Agricultural Safety Web Site. ARI Grant (\$37,000). In Progress.

Spiess, M. Yen, M., Gu, S. 2000. Feasibility Study of Remote Sensing as an Economically Viable Vineyard Management Practice. ARI Grant (\$80,000). 2000-2002

Strohman, R., Spiess, M, 2000. Development of Precision Agricultural Curriculum for California Agricultural Leaders. ARI Grant (\$240,000). 2000-2002

Spiess, M. 2000. An Introduction to Precision Agriculture Technologies. Presented at the California Plant and Soil Conference. Stockton, California.

Strohman, R., Spiess, M, 1999. Development of Precision Agricultural Curriculum. USDA Challenge Grant (\$240,000). 1999-2002

Spiess, M. 1999 GIS Use in Precision Agriculture. Presented at GIS Day, California State University Fresno.

Spiess, M. 1999 GIS Use for Land Conservation. Presented at GIS Day, California State University Fresno.

Spiess, M. & Moffit, K. 1999. GIS Across the Curriculum. Presented to the annual CETL Conference at California State University, Fresno.

Spiess, M. 1998-. Development of CalAgEd.org web site. A resource web site for California vocational agriculture teachers. Funded by the California Department of Education. Continuing project.

Spiess, M. GIS use in Agriculture. 1998-1999. A project to demonstrate the use of GIS and geo-spatial technology in California agriculture. Funded by California Agricultural Technology Institute/ATI Net (\$24,000).

Spiess, M. & Zoldoske, D. et. al. 1997-1998. Development of Wateright, a weather based irrigation scheduling web site. Funding by US Bureau of Reclamation and the Center for Irrigation Technology

Other Activities and Projects

Appointed as a California Teacher Credentialing Commission California SMAP Panel (Agriculture). The panel develops materials for the CSET test and program standards for the single subject agriculture credential. (2004-2005)

Created an online accounting application for the student crops projects. The application allows students and instructors to track project activity and enter financial information. Financial analysis and other reporting is provided in real time and a historical record of student projects is created as a resource for future

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- students. The system allows the instructor and farm staff to email students and post their observations to the students' project record. (2004-2005)
- Created an online application to track student activity in for agricultural credential students in the Early Field Experience, Practicum I and Practicum II (student teaching). Students are required to document their time and activity in these classes in order to receive their credential. The system tracks their activity by course and provides the student and instructor with both detail and summary reports to support their credential application. The system also allows Master teacher's to make their reports online. (2004)
- Created an online application to track student activity in directed work, internship, and independent study projects. Students create a contemporaneous log of their activity that helps them and the instructor track their progress toward completion of these courses. (2004)
- Agricultural Mechanics Career Development Event. Developing an updated tool identification reference that will be the standard for the California contest. Reference will be published in electronic form for used by high school teachers. (2004-2005)
- Created an online application to track contest information for FFA contest advisors. Includes requests for facilities and automatic updating of the contest web site. Data is summarized for uses such as ordering tables and chairs and compilation of contest information for the results book. The system automatically updates public web page for each contest. (2004)
- Creation of a web based application to aid students in planning their class schedules and help advisors track their progress. Students create an academic plan using built in templates. Advisor work load is reduced since the system provided online review of the students' progress toward the degree and/or credential. Advisors can also use the system to keep a record of the advising process and to send emails to advisees. (2002-2004).
- Developed an on-line system for tracking curriculum changes throughout the University. The system tracks progress throughout the committee review process, prints agenda, notifies interested parties by email of status changes. (2002)
- Developed a GIS resource CD for K-12 science teachers as part of the Central Valley Science Leadership Institute. (2002)
- Developed an on-line registration system for FFA contests. The system tracks registration and provides administrative options to set fees and other attributes of the contests. (2002-2003.) Note: This system is now part of the CalAgEd web site and is used by five colleges and universities for eight state wide events and for registration of the Greenhand conferences (California FFA).
- Creation of a web site and on-line data collection system for community development (Malaga, CA). Data collection system is a secure site that generates data for program evaluation. Part of a Prop 10 grant. (2001-2003)
- Developed an on-line student portfolio system for use by students and departmental assessment. (2000-2002)
- Developed a secondary curriculum for precision agriculture. (2001)
- Developed computerized tabulations programs for Agricultural Mechanics, Farm Power, Small Engines, Floriculture, Citrus, Vine Pruning, Cotton, Vegetable Crops, and Tree Pruning FFA contests. (2000-2002)
- Developed database application to track registration and results for FFA contests. (2000-2001)
- Developed an on-line slide show system for presenting identification or other photographs. Currently in use in mechanized agriculture instruction. (1999-2000)
- Maintain a GIS database for the CSU, Fresno University Agricultural Laboratory (1998-2003)

Committees

- Academic Technology Advisory Committee

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- Beyond 2000 Committee
- College of Agriculture Agricultural Teaching and Research Center Committee.
- College of Agriculture Research Committee.
- College of Agriculture Curriculum Committee
- College of Agriculture Web Committee (ad hoc)
- Superior Ag Committee
- American Association of Agricultural Educators Western Region Poster Committee Chair.
- CSU, Fresno Agricultural Literacy Advisory Committee (2000-2003)
- University Web Advisory Committee (CSUF 1998-2003)
- Founding member of the Interdisciplinary Spatial Information Center Committee (CSUF 1998-2003).
- Digital Campus Fellow representing the College of Agricultural Sciences and Technology (CAST) (CSUF 2002-2003)
- College Undergraduate Curriculum Committee & Chair Plant Science Department curriculum committee (CSUF 1998-2003)

Other Interests

- Life member of the California Agricultural Teachers' Association.
- Member of the American Association of Agricultural Educators.
- Member of the Irrigation Association.
- Director and Treasurer, Northern California Regional Land Trust. (A land trust preserving open and agricultural lands in the tri-county area.) (2004-2006)
- Advisor, Collegiate Future Farmers of America student organization CSU, Fresno (1999-2003).
- Member of the Central West High School Agricultural Advisory Committee. (1998-2003).
- Treasurer and Director of the Sierra Foothill Conservancy, which is a land trust that manages over 4500 acres of open land for grazing and habitat conservation. (1996-2003)
- Director, University Hope, a home building project that provides affordable housing. (1997-2003)
- Member of Cave Research Foundation, Life Member of the National Speleological Society. Member Western Cave Conservancy (serve on acquisition committee).
- Private Pilot (instrument rated).