



"As we look to the future, we can think of no greater investment than the education of our future engineers and computer scientists."

S.K. Ramesh, Ph. D.
Professor of Engineering and Computer Science
Principal Investigator, AIMS<sup>2</sup> Grant

Computer Languages and Programming

Software Engineering Operating Systems

Networking

Web Development Instructional Design and Gaming Theory

l Virtual and Augmented ry Reality

Artificial Intelligence

# PROGRAMS AND RESOURCES FOR WOMEN AND GIRLS INTERESTED IN COMPUTER SCIENCE

Welcome to the exciting world of Computer Science at California State University, Northridge! CSUN students are at the forefront of new technological innovations and discovery. From designing systems and software, to inventing new solutions, to bridging the technology gaps in education and communications, students are mentored and guided through their passion projects by expert faculty members.

We have developed this resource guide to assist you in locating organizations, events, and clubs on CSUN's campus and in the surrounding San Fernando Valley community in the hope that the network of support for women and girls in computer science will continue to grow.



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## Selected CSUN Faculty and Staff

Hilary J. Baker, M. Arch. Vice President for Information Technology and Chief Information Officer

Susan Belgrad, Ed.D. Professor, Department of Elementary Education: Faculty Lead for STEM Leadership

Richard G. Covington, Ph.D. Associate Professor and Chair, Department of Computer Science

Patricia Dousette, M.S. Lecturer, Department of Computer Science

Pratima Dutta, Ph.D. Director of Distance Learning, Tseng College

Jacob Enfield, Ph.D. Assistant Professor, Department of Cinema and Television Arts

Wen Chin "Amy" Hsu, Ph.D. Assistant Professor. Department of Computer Science

## Ranjitha Kashyap, M.S. Lecturer, Department of Computer Science

## Gloria Melara, Ph.D.

Professor, Department of Computer Science Faculty advisor to the AIMS<sup>2</sup> (Attract, Inspire, Mentor, and Support Students) grant for Hispanic/underserved students.

AIMS<sup>2</sup> includes Engineering and Computer Science and Education faculty. in collaboration with Community Colleges (Glendale, COC, Pierce, Moorpark, Mission). It also includes Summer Bridge. Virginia (Yevgeniya) Mushkatblat, M.S. Lecturer, Department of Computer Science

## Ani Nahapetian, Ph.D.

Associate Professor, Department of Computer Science Principal Investigator, TIDES Grant Society of Women Engineers at CSUN (SWE) www.ecs.csun.edu/tides

Vidya Nandikolla, Ph.D. Assistant Professor. Department of Mechanical Engineering

Daniel Novak, Ph.D. Assistant Director of Distance Learning, Tseng College

## S.K. Ramesh, Ph.D.

Dean, College of Engineering and Computer Science Principal Investigator, AIMS<sup>2</sup> Grant, www.ecs.csun.edu/aims2

## Omar Ruvalcaba, Ph.D.

Assistant Professor, Department of Psychology Research Focus: Girls of color and STEM

## Diane Stephens, M.B.A.

Associate Vice President, Academic Resources and Planning diane.stephens@csun.edu

## Deone Zell, Ph.D.

Associate Vice President for Academic Technology

## **CSUN Events and Organizations**

## Accelerated Coursework in Computer Science and Engineering for Student Success (ACCESS) Program

College of Engineering and Computer Science & 12 area high schools; Deazell Johnson, ACCESS Coordinator

High school teachers take a summer workshop at CSUN and teach lab; High school students enroll in ACCESS course through CSU-wide Talented High School Program (THP).

www.calstate.edu/cce/annualreport/2012/northridge.shtml www.ecs.csun.edu/ecs/enews/?x=entry:entry100616-143106 make.xsead.cmu.edu/knowledgebase/schools/schools/californiastate-university-northridge

# Center for Engineering and Computer Science Research and Education

## College of Engineering and Computer Science

Promotes activities between the Engineering/Computer Science community and the College of Engineering and Computer Science. www.csun.edu/engineering-computer-science/center-researchand-services

# CSUN Enrichment Program Courses for Girls in Computer Science

## Michael D. Eisner College of Education

Summer Program for Middle Schoolers: courses dedicated to coding, gaming, etc.

www.csun.edu/eisner-education/summer-academic-enrichment-program/enrichment-program

## META+LAB

META+LAB provides an inter-disciplinary environment where selected CSUN students are mentored by professionals to be jobready in the web development industry.

Contact: Stephen Fitzgerald at stephen. fitzgerald@csun.edu www.metalab.csun.edu

## Society of Women Engineers (SWE)

National Professional Society www.ecs.csun.edu/swe/

## Virtual and Augmented Reality Showcase (VARJAM)

CSUN competition where students develop augmented or virtual reality projects. www.csun.edu/varjam

California State University, Northridge • Women and Girls in Computer Science

## CSUN Bonita J. Campbell Endowment/WISE Board

## Bonita J. Campbell Endowment for Women in Science and Engineering

Mark Stover, Ph.D., Dean, University Library Student Internships, Guest Speakers library.csun.edu/WISE

## Women in Science and Engineering (WISE)

Advisory group for Bonita J. Campbell Endowment for Women and Science

## Laurene Abato-Earwood, M.S.

Chair, Bonita J. Campbell Advisory Board M.S. Electrical Engineering, CSUN High school youth, robotics

Susan Belgrad, Ed.D. WISE Board Member

## Jenniffer Herrera, M.S.

## WISE Board Member

CSUN Alum, B.S. Manufacturing Engineering Management; M.S. Engineering Management

## Diana Kulisek, M.S.

#### WISE Board Member

Quality Assurance Leader: Consultant, specialized needs, medical device industry, high tech computer manufacturing, computer software manufacturing.

CSUN Alum, B.S. Biology; M.S. Engineering

## Phyllis Marbach, M.S.

#### WISE Board Member

President, International Council on Systems Engineering Los Angeles (INCOSE-Los Angeles), 35 years of aerospace industry experience

## Kathleen Paulson

#### WISE Board Member

Retired mechanical engineer from the Engineering and Expeditionary Warfare Center, Involved in STEM outreach; 2013 CSUN Volunteer Service Award recipient CSUN Alum, B.S. Engineering

## Lily Shraibati

WISE Board Member

Volunteer, Robotics Education and Competition Foundation. CSUN Alum, B.S. Engineering

## Marilee J. Wheaton, M.S.

#### WISE Board Member

Executive Director and General Manager. The Aerospace Institute at the Aerospace Corporation. Fellow and Life Member of the Society of Women Engineers; active member of the Los Angeles Section for 28 years.

## **CSUN Student Clubs/Groups**

## CSUN Computer Science and Technology Club (CST)

CST aids and encourages future undergraduates from various high schools and Community Colleges to pursue a career in a STEM field www.csun.edu/mic/apps/clublisting/directory.php?index=s

## **CSUN VEX Robotics Club**

VEX Robotics is an international education initiative encouraging students of all ages to discover science. technology. engineering and math (STEM) fields related to robotics design. and supporting leadership, teamwork and problem-solving skills.

csunshinetoday.csun.edu/csun-leaders/csun-vex-robotics-clubqualifies-for-world-championship/

## CSUN Women in Science (WiS) Facebook

WiS supports Latinas Who Code. Olive Vista STEM Magnet, Sylmar Collaboration with DIY Girls www.facebook.com/CSUNWiS/

## Radius 2.0

Radius 2.0 is a global consortium of student enterprises, which facilitates creative solutions by activating design thinking across all innovative disciplines. It provides advertising, integrated communication plans, and brand strategy solutions for businesses and organizations around the world. It does it while embracing art and design with a relentless focus on user experience.

## www.radius20.com

## VISCOM

CSUN's on-campus student-run creative agency, providing design for brands, experiences, and time-based media for a wide range of regional, national and global clients.

www.viscomcenter.com

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## **CSUN/Community Partnerships**

## CSUN/DIY Girls

#### After school computer science program for 5th-8th grade girls

10 week creative coding program with CSUN students in Computer Science and Engineering as instructors. CSUN/DIY Girls mission is to increase girls understanding & success in technology & engineering.

Luz Rivas, Founder; Pacoima, San Fernando Valley

www.cscproject.org/program/diy-girls-3

www.diygirls.org

www.diygirls.org/staff/

## California Career Pathway Trust (CCPT) \$6 million grant to develop Career Pathways K-14

Collaboration; Manufacturing, Innovation, & Entrepreneurship; Animation, Gaming, etc.

College of Engineering and Computer Science, S. J. Gandhi, V. Nandikolla; College of Art, Media, Communications, Dave Moon, M. Farquhar; Verdugo Creative Technologies Consortium (Glendale USD, Burbank USD, Glendale CC, CSUN).

## csunccpt.csunccpt.com/p/welcome-to-csun-ccpt.html csunshinetoday.csun.edu/education/csun-faculty-break-downsilos-to-help-train-tomorrows-workforce/

## NASA Educator Professional Development Collaborative (EPDC)

## STEM Educator Professional Development Collaboration

Work with K-12 educators and CSUN STEM faculty Susan Belgrad, Ed.D., Norm Herr, Ph.D., Principal Investigators, Michael D. Eisner College of Education

## sites.google.com/site/csunnasastem/quarterly-reports

## Rally in the Valley

Attracts 48% of upper elementary school girls to an annual LEGO Education Robotics competition. www.lliu.org/riv

## **Girl Powered Initiative**

Robotics Education & Competition Foundation The REC Foundation launched Girl Powered, in collaboration with VEX Robotics, Inc., to double the number of girls on robotics teams over the next five years.

Nancy McIntyre, Founder

www.roboticseducation.org/competition-teams/girlpowered/

## San Fernando Valley High School Computer Clubs

## Canoga Park High School

Robotics

www.canogaparkhs.org/clubs\_and\_organizations.jsp

## Cesar Chavez Learning Academies, San Fernando

Academy of Scientific Exploration ase-lausd-ca.schoolloop.com/projects

## Granada Hills

CyberSecurity Club, Game Development Guild, STEM Club www.ghchs.com/activities/clubs

## John F. Kennedy High School, Granada Hills

Architecture and Digital Arts Magnet www.jfkcougars.org/apps/departments/clubs.jsp

## San Fernando Senior High School

Architecture and Robotics. AFA CyberPatriot www.sanfernandohs.com/apps/pages/index.jsp?uREC\_ ID=124496&type=d&pREC\_ID=staff www.uscyberpatriot.org/Documents/CP-VII%20Current%20 Team%20Registration%20List.pdf

## Sun Valley High School

Robotics, AFA CyberPatriot sunvalleyhs-lausd-ca.schoolloop.com/Robotics sunvalleyhs-lausd-ca.schoolloop.com/Clubs

## Sylmar Charter High School Game Club

www.sylmarhs.org/



## **External Organizations**

## Code.org

Code Programs for Students and Educators code.org/educate/pd/15-16/lausd www.geekwire.com/2015/1m-girls-1m-african-american-hispanic-

students-learn-code/

## Codechix

Rupa Dachere, Executive Director And Founder, Advisory Board member for CSUN  $\mathsf{AIMS}^2$  Grant

Codechix.org

## Girls Academic Leadership Academy

First all-girls school (Middle and High School) in LAUSD with STEM Focus

www.galacademy.org/about

## Girls Who Code

## Reshma Saujani, Founder

Summer Immersion Program - High School Sophomore and Junior Girls and High School Clubs reshmasaujani.com/

girlswhocode.com/programs/

## National Center for Women and Information Technology

www.ncwit.org/programs-campaigns/aspirations-computing

## National Girls Collaborative Project

Reaches and serves underrepresented girls in STEM ngcproject.org/

## Roominate

Bettina Chen, Founder A line of STEM-focused building toys aimed for girls.

www.roominatetoy.com

## **Promote Computer Science**

code.org/promote/ca

## Whiz Girls Academy

Shirin Salemnia (Child/Family and Consumer Sciences '02). Founder The Academy is designed for tweens and teens, and features an engaging curriculum centered around science, technology, engineering and math, and an exciting, project-driven program with a secret agent theme. Lessons are Briefings, hands-on projects are Missions, and each member is a confident, empowered Agent on the ultimate mission to build practical knowledge about coding, healthy balanced lifestyles, entrepreneurship and more.

www.whizgirlsacademy.com/