

# Computer Science



**Do you value rigorous academics? Like a challenge? Seek to understand the common threads running through every discipline?**

Consider a major in computer science, the formal study of abstract problem-solving. Computers permeate every facet of our society, so more and more careers relate to them: bioinformatics, cognitive science, digital media arts, neuroscience, artificial intelligence, computer graphics, management information systems, human-computer interaction, and intellectual property law. In fact, all fields and organizations welcome the talents of properly trained computer scientists. Learn how to organize and communicate information, use algorithms, procedures or formulas for solving problems, and work with a team to find practical applications.

## SELECTED COURSES

- Design and Implementation of Solutions to Computational Problems
- Discrete Mathematics
- Abstract Models for Concrete Problems Using Java
- Programming Languages
- Creative Software Architectures for Collaborative Projects
- Computational Biology

## CAREER PATHS

- Software engineer
- Software test engineer
- Data engineer
- IT specialist
- UX designer
- Product management
- Sales engineer



**WESTMONT**  
SANTA BARBARA

## FACULTY HIGHLIGHTS



MIKE RYU, M.S.

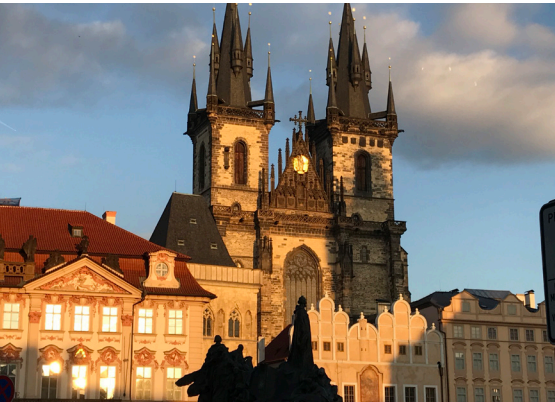
Brings software engineering and technical management skills to Westmont from Silicon Valley.



GUANG SONG, PH.D.

Does research in Computational Biology and Machine Learning

## OPPORTUNITIES



- Westmont in Asia
- Westmont's Europe Semester
- Westmont in San Francisco
- Westmont Downtown
- Westmont's Center for Applied Technology (CATLab)
- Westmont's South Africa Mayterm

## ALUMNI

**Kyle Hansen '19**, double majored in mathematics and computer science at Westmont. He recently earned his doctorate in mathematics from UC Santa Barbara, and presented his research in complex analysis at the Joint Mathematics Meetings in Baltimore.

**Talia Bjelland '22**, tutored her peers in the finer points of programming, built software for Westmont through the CATlab program, and has interned at

Best Buy. She has leveraged her Spanish minor in tutoring Spanish-speaking individuals with Down Syndrome in Mexico.

**Valentina Costarelli '23**, born in Italy, studied at Caltech and graduated from Westmont with a degree in applied sciences, statistical analysis and management. Currently, she is an AI software engineer and team lead at Amazon.