

Nathan Greenfield

Curriculum Vitae

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Education

University of Southern California (USC)	2012
M.S., Computer Science	
University of California, San Diego (UCSD)	2000
B.S., Computer Science	

Academic Positions

<i>Daniel J. Epstein Department of Industrial & Systems Engineering</i>	2021 – Present
Senior Lecturer	2021 – Present
<i>Information Technology Program</i>	2012 – 2021
Assistant Director	2017 – 2019
Senior Lecturer	2017 – 2021
Lecturer	2015 – 2017
Adjunct Lecturer	2012 – 2015

Teaching

- ISE150 (Solving Engineering Problems via Code) 2019 – present: First year ISE course in Python, covered CS1 and ETL topics; author and instructor
- ISE382 (Database Systems: Concepts, Design, and Implementation) 2014 – present: ISE relational database course; author and instructor
- ISE499 (Special Topics) 2017 – 2018: First year ISE course in Python, covered CS1, ETL, and data analysis; author and instructor
- ITP109 (Introduction to Java Programming) 2013: First programming class, covered CS1 topics; instructor
- ITP111 (Introduction to Cloud Technologies) 2014, 2021 – present: Introductory class in Cloud computing; author and instructor
- ITP165 (Introduction to C++ Programming) 2013 – 2017: First programming class in a minor, covered CS1 topics; author and instructor
- ITP365 (Managing Data in C++) 2014 – Present: Data structures course in C++; author and instructor
- ITP499 (Special Topics) 2012: C++ debugging course; author and instructor

Internal Service

- Annual merit review committee (2014, chair 2015, chair 2016, 2017)
- Faculty mentor (1 in 2014, 3 in 2015, 4 in 2016, 7 in 2017, 6 in 2018, 3 in 2019, 3 in 2020, 7 in 2021)
- Guest lectures – topics include “Building a web server”, “How to navigate the career fair”, “The Cloud”, “Virtualization”, “What is Programming”, “Where does all that data come from?” (2013 – 2021)
- Hiring committee (chair 2x 2015, 1x 2016, 2x 2017, 1x 2018)
- Individual practicum students (17 total)
- Industry advisory board (chair 2016, 2017, 2018, 2021)

- Investigated, implemented, and administered FERPA complaint shared, versioned course material repository (2014 – 2019)
- IT liaison (2017 – 2019) – including managing servers, desktops, virtual and hardware infrastructure
- Oversaw department 3-unit to 4-unit conversion effort (2018 – 2019)
- Promotion committee (2019 – 2020)
- Reappointment committee (2x 2018, 1x 2019, 1x 2020, 3x 2021)
- Undergraduate committee (2022)

External Service

- AWS liaison (2014)
- Engineering curriculum committee (2016 to present)
- ISE curriculum revision for updated database course (2014)
- ISE undergraduate program revision to include new introductory Python course (2017)
- Participated in ISE ABET accreditation (2015, 2021)
- NAI contributor and instructor (2018, 2019)
- ISE curriculum revision for updated programming and database courses (2021)
- Recorded lectures for Integrated Design, Business, and Technology online MS program

Professional Experience

Center for Orthopedic and Sports Excellence (COSE)

2009 – 2020

System Administrator

- Facilitated transition from onsite electronic health records to online electronic health records solution
- Upgraded and maintained software and hardware for electronic health records solution from 3rd party vendor
- Upgraded hardware and software systems for transition from Centrex to voice over IP telephones

USC Gamepipe

2007 – 2008

Lab Manager

- Oversaw installation and managed new laboratory security systems
- Created, maintained, and executed lab budget
- Executed TA responsibilities for PS3 class including: maintaining Linux on lab's PlayStation 3s, writing assignments using Cell SDK, and lecturing on Cell programming

Self Employed Consultant

2005 – 2006

Information Technology Specialist

- Acquired, installed, configured, and maintained server and workstation systems for point of sale (POS) networks
- Educated users and developed solutions for sales and inventory tasks
- Clients included medical offices, retail stores, and a mortgage company

Hilton Hotels

2004 – 2005

Programmer Analyst

- Created and maintained documentation for database migration from Sybase to SQL Server

- Designed and implemented updates to recommendations subsystem including interface to central reservations in C and Korn shell solutions
- Updated SQL scripts for reports generations from Sybase database

Science Application International Corporation (SAIC)

2002 – 2004

Software Engineer

- Designed, coded, and maintained Java software to manage Oracle database operations on a joint military project on a JBoss application server
- Coded and maintained XSLT documents for the above task
- Maintained and transferred FDA regulated database data from VMS to Oracle with Informatica

Ericsson Wireless

2000 – 2002

Software Engineer

- Designed, coded, and maintained Java code for a CDMA network
- Developed Perl tools to generate Java code from XML documents for the above task
- Designed, coded, and maintained upgrade functionality for resource plane of CDMA network
- Coded and maintained alert and alarm functionality for core functionality of CDMA network
- Maintained Rational Rose XML project documents detailing object hierarchy and class attributes