Eileen J. Choe

Curriculum Vitae

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Education

2014-Present BS, Computer Science, Loyola Marymount University (LMU), Los Angeles, CA

Minor in Applied Mathematics University Honors Program Expected: May 2018 Cumulative GPA: 4.0/4.0

Research Experience

Loyola Marymount University

January 2017 - Undergraduate Researcher, GRNsight

Present Research Advisors: John Dondi Dionisio, Ph.D., Professor of Computer Science

Kam Dahlquist, Ph.D., Professor of Biology

Currently developing a node coloring framework to visualize gene expression data for GRNsight, a web application and service for visualizing small- to medium-sized gene regulatory networks.

Professional Experience

May 2017 - **Software Engineering Intern**, Blue Origin, Kent, WA

August 2017 Developed interactive user interfaces using Angular for enterprise web applications used for rocket development and manufacturing. Used redux to implement client-side state management for part serial numbers. Integrated a self-hosted analytics platform to track and analyze user data.

June 2016 - Engineering Intern, NASA JET PROPULSION LABORATORY, Pasadena, CA

January 2017

Developed a data analysis pipeline for thermopile detector chip aging characterization tests, reducing individual test analysis time by over 50%. Programmed an application which analyzes the trends between electrical components used in CubeSATs and in "flagship" JPL missions.

May 2015 - Engineering Intern, RAYTHEON SPACE AND AIRBORNE SYSTEMS, El Segundo, CA

August 2015 Performed risk assessment of a rectifier diode through research and qualification testing to characterize suitability for use across Raytheon product line. Performed parts obsolescence reviews and drafted Raytheon Vendor Control Drawing and Change Notice documents.

Publications

2016 Ray Toal, Rachel Rivera, Alexander Schneider, and Eileen Choe. 2016. Programming Language Explorations. Chapman & Hall/CRC.

Presentations

November Southern California Conferences for Undergraduate Research (Pomona, CA)

2017 Research Advisors: John David Dionisio, Ph.D. and Kam Dahlquist, Ph.D.

Oral Presentation: "GRNsight v2: a web application for visualizing models of small gene regulatory networks"

October 2017 Society of Women Engineers Undergraduate Research Competition (Austin, TX)

Research Advisors: John David Dionisio, Ph.D. and Kam Dahlquist, Ph.D.

Oral Presentation: "GRNsight v2: a web application for visualizing models of small gene regulatory

March 2017 Loyola Marymount University Undergraduate Research Symposium (Los Angeles, CA)

Research Advisors: John David Dionisio, Ph.D. and Kam Dahlquist, Ph.D.

Poster Presentation: "Improved data interoperability for GRNsight: a web application for visualizing models of gene regulatory networks"

Awards

October 2017 Society of Women Engineers Undergraduate Research Competition Finalist Travel Award

May 2017 LMU College of Science and Engineering Outstanding Junior Computer Scientist Award

May 2016 LMU College of Science and Engineering Outstanding Sophomore Engineer Award

May 2015 LMU College of Science and Engineering Outstanding Freshman Engineer Award

May 2015 LMU Service and Leadership Award

2014 - 2018 LMU Presidential Academic Scholarship

Teaching Experience

Loyola Marymount University

Spring 2017 Teaching Assistant for CMSI 186 -Programming Laboratory (Java)

Instructor: John David Dionisio, Ph.D

Spring 2016 Teaching Assistant for ENGR 160 - Algorithms and Applications (MATLAB)

Instructor: Nazmul Ula, Ph.D

Professional Memberships and Societies

2016 - Association for Computing Machinery

Present Member

2014 - Society of Women Engineers

Present LMU Section President (2017 - 2018)

Region B Collegiate Communications Editor (2017 - 2018)

LMU Section Vice President (2016 - 2017) Region B SWE Future Leader (2016 - 2017) LMU Section Outreach Coordinator (2015 - 2016)

2017 - Alpha Sigma Nu Jesuit Honors Society

Present LMU Section Secretary (2017 - 2018)

Software Skills

Programming Java, JavaScript, Python, C, C++, CSS, HTML, MATLAB

Languages

Tools and Express, Node.js, Angular, D3.js, Git

Frameworks

Operating Windows, Linux, Macintosh

Systems

International Experience

Fall 2015 LMU Engineering Study Abroad Program in Bonn, Germany
Summer 2015 LMU Summer Study Abroad: Christianity and Art in Rome
January 2015 LMU Alternative Break Social Justice Immersion Program: Haiti