Maya Josyula

⌂ mayajosyula.github.io   in maya-josyula   ⌕ mayajosyula

Work and Research Experience

Software Engineer → Senior Software Engineer, IXL Learning   *September 2022 – Present*
– Vocabulary.com, Dictionary.com, Thesaurus.com

Software Engineer, Clutter   *June 2021 – July 2022*
– Marketplace and growth/conversion

Graduate Research Assistant, UC San Diego   *Summer 2020 – Summer 2021*
– Researched the design and analysis of algorithms for boosting with noisy data

Recurser, Recurse Center   *Spring 2021*
– Built projects involving ML model development (design, gathering data, training, and deployment)

Teaching Assistant, UC San Diego   *Fall 2019, Winter 2020, Spring 2020, Fall 2020, Winter 2021*
– Led discussions and held office hours for undergraduate algorithms class (200-500 students)

Summer Undergraduate Research Fellow (SURF), Caltech   *Summer 2018*
– Applied group theory/abstract algebra concepts to help define and analyze voting systems

Undergraduate Research Assistant, Caltech   *Spring 2018*
– Implemented and tested an acceleration framework for convex program solvers in Python

Summer Research Intern, Mitsubishi Electric, Information Technology R&D Center, Japan *Summer 2017*
– Developed Matlab program to simulate crowd movement around roadblocks using a CFD model

Summer Intern, Army High Performance Computing Research Center, Stanford   *Summer 2016*
– Developed geometrical models of upper lung structures for studying effects of aerosol exposure

Education

University of California, San Diego, M.S. in Computer Science   *2019 – 2021*
California Institute of Technology, B.S. in Mathematics, minor in Computer Science   *2015 – 2019*

Publications

Equitable Voting Rules. Bartholdi, L., Hann-Caruthers, W., **Josyula, M.**, Tamuz, O., Yariv, L. *Econometrica* (2021). arXiv:1811.01227

Skills

Computer Languages: Java, Python (NumPy, SciPy, sklearn, Sage, Matplotlib, Jupyter), Ruby on Rails, JavaScript (TypeScript/React), C/C++, MATLAB/Octave
Computer Skills: Unix, LaTeX, HTML/CSS, Git, AWS

Selected Outreach Activities

Grader, Art of Problem Solving Online School (Prealgebra, Algebra, Geometry)   *2017 – 2019*
Clarinet Choir Member, Caltech (Gave free concerts at public libraries for wider community)   *2016 – 2019*
Science Olympiad Volunteer, Caltech (Test monitor and judge for regional and state competitions) *2016 – 2018*

Foreign Languages: Japanese (intermediate proficiency), French (intermediate proficiency)
Accolades: Larson Scholar (Caltech SURF), Perpall SURF Speaking Competition Semifinalist, National Merit Scholar, U.S. Presidential Scholar Semifinalist, National AP Scholar