

# Emily M. Lin

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## PROJECTS

### Job Skills Data Sorting Visualization | [Demo](#) | [Code](#)

- Technologies/Techniques: React, JavaScript, HTML, CSS, Axios, sorting algorithms, recursion
- Implemented merge sort, bubble sort, and quick sort to visually sort data fetched from Job Skills API project

### Hexagon Grid A\* Pathfinder Visualization | [Demo](#) | [Code](#)

- Technologies/Techniques: React, JavaScript, HTML, CSS, A\* algorithm, path finding, OOP?
- Built and applied A\* Algorithm to find the shortest path visually through a grid of hexagons and barriers

### Flight Time Analyzer | [Demo](#) | [Code](#)

- Technologies/Techniques: Node.js, Express, MongoDB, MapQuest API, JSON, JavaScript, web scraping
- Built app to determine optimal time to leave for a flight using MapQuest API and scraping TSA security times

### Job Skills API | [Demo](#) | [Code](#)

- Technologies/Techniques: Node.js, Express, JSON, JavaScript, HTML, CSS, web scraping
- Description

### Conway's Game of Life with Maze Algorithm Visualization | [Demo](#) | [Code](#)

- Technologies/Techniques: React, JavaScript, HTML, CSS, recursive division algorithm, recursion
- Built Game of Life (mathematical solitaire game) with recursive division maze algorithm as game initializer

## PROFESSIONAL EXPERIENCE

### Capgemini | Applications Consultant

San Francisco, CA | Aug 2019 – Present

- Managed 10 month agile development project for a 50+ billion revenue Information Technology company //through lifecycle phases ???? add somewhere
- Analyzed and executed test scripts, input data, and transaction codes for daily invoice generation in SAP
- Created SAP GUI and SAP Fiori business partner data for invoice testing and subscription data for training
- Wrote Functional Specification Interface for billable items (BITs) including backend and frontend requirements, TIBCO middleware and system attribute specifications, data field mappings, and error handling
- Created SAP BRIM Functional Design Documents for master data, subscription contracts, and global settings
- Managed sprint readiness, scrum meetings, converted and maintained 115+ user stories from Excel into Jira

### Unum Group | Actuarial Intern

Worcester, MA | Jun 2018 – Aug 2018

- Evaluated new and old methods of conservation (a process to increase persistency) to grow premium profitably
- Analyzed large data, wrote and edited SQL queries, and created Excel pivot tables to clean and compile data
- Compared compiled data with QlikView tracking dashboards to ensure data accuracy and completeness
- Identified low credibility in data due to low amount of total earned premium (\$7.0 million) in new method
- Analyzed ratios, rates, and factors (gender, product, occupation, age) to evaluate conservation performance
  - Calculated a 4% increase in persistency rates and a 27% decrease in loss ratios between methods
  - Quantified loss ratio trends between genders: 50% difference in new method, 31% difference in old method
- Developed a repeatable process in SQL and Excel to easily compile data and evaluate future performance

### Institute of Mathematics, Academia Sinica | Mathematics Research Aid Taipei, Taiwan | Jul 2017 – Aug 2017

- Learned about the graphics processing unit (GPU) and examined its efficiency in summing large data sets
- Evaluated the advantages of the GPU compared to the central processing unit (CPU) in computer graphics
- Introduced to parallel programming and GPU computing in finance regarding Monte Carlo integration

## EDUCATION

### University of California, Los Angeles (UCLA)

Jun 2019

B.S. in Financial Actuarial Mathematics

GPA: 3.6

- Dean's Honors List:** Fall 2015, Winter 2018, Spring 2018, Fall 2018, Spring 2019
- Relevant Coursework:** Discrete Structures, Real Analysis, Probability Theory, Linear Algebra, Calculus II/III

## SKILLS & INTERESTS

**Technical:** JavaScript, React, Node.js, Express, MongoDB, HTML, CSS, Git, Agile (Scrum)

**Project Management:** Jira | **Languages:** Mandarin Chinese (conversational) | **Dance:** UCLA Foundations

**Volunteer:** Foster youth UniCamp counselor, UCLA Alpha Phi Omega 60+ service hours

Achieved SAP S/4HANA certification,

**Mathnasium | Mathematics Instructor**

*Thousand Oaks, CA | Aug 2014 - Aug 2015*

- Trained to tutor and approach mathematics logically, raised students' scores over 30% to boost class letter grades
- Engaged in probability theory seminars and participated in informational presentations from KGI Bank
- Consulted parents regarding student progress and trained in how to tutor and approach mathematics logically

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**LEADERSHIP EXPERIENCE**

**Alpha Phi Omega, International Coeducational Service Fraternity**

*Los Angeles, CA*

*Team Coordinator*

*Apr 2017 - Jun 2017*

*Activity Director of New Members*

*Sept 2015 - Jan 2016*

- Allocated event budget resources, tracked attendance for over 60 members, and encouraged team spirit
- Worked on a team to film and edit three promotional videos that increased member participation in events
- Coordinated service and team bonding activities, managed transportation and reservation for fellowship event
- Dedicated over 60 hours of community service
  - Monday Night Mission: Prepared and delivered hygiene kits to the homeless at Skid Row, Los Angeles
  - Meals on Wheels: Provided personalized meals to isolated or disabled seniors living below the poverty line
  - Wheelchair Basketball: Assisted and worked with paraplegic children in basketball and physical activities

**Phi Sigma Rho, National Engineering and Technologies Sorority**

*Los Angeles, CA*

*Financial Board Member*

*Apr 2017 - Jun 2017*

- Managed fundraiser at Native Foods Café that donated back 20% of purchases to boost club funds
- Engaged in annual multi-organizational philanthropy event benefiting the Leukemia and Lymphoma Society

- Created subscription contract data in the SAP frontend and backend systems for training videos