

Randy Fan

(214) 616-0069 ★ randyfan@berkeley.edu ★ randyfan.com

Education

University of California, Berkeley

Computer Science and Economics

GPA: 3.93 / 4.0

Relevant Coursework: Computer Graphics, Artificial Intelligence, Discrete Math and Probability Theory, Data Structures, Data Science, Structure and Interpretation of Computer Programs, Linear Algebra and Differential Equations, Probability in Data Science

Plano West Senior High School

Class Rank: 3 out of 1389; SAT: 2320 / 2400; ACT: 36 / 36; SAT II – Math II: 800; National AP Scholar

Berkeley, CA

Class of 2020

Plano, TX

Class of 2016

Work Experience

University of California, Berkeley (Electrical Engineering & Computer Science)

Undergraduate Graphics Researcher (Professor Carlo Séquin's group)

Berkeley, CA

Jan 2019 – Present

- Research areas include cellular automaton, random walks, and interactive CAD software.
- Developed 3D turtle graphics in a body-centered cubic system to construct complex geometries.
- Implemented self-avoiding random walks and created sensor heuristics that led to exponential increases in path length.
- Other projects include: ant colony simulation, maze generation, fire simulation, Perlin noise on torus terrain, pixel array patterns.

Microsoft

Financial Data Analyst Intern

Redmond, WA

May 2018 – Aug 2018

- Developed and introduced a dynamic scoring system that utilizes a weighted scoring methodology to score expense accounts based on inefficiency. This new system (built into an automated PowerBI dashboard) has been adopted by the Financial Data Management (FDM) team, significantly reducing the amount of manual account repurposing work needed.
- Published a 30+ page handbook detailing my scoring system.
- Implemented SQL queries directly connected to Microsoft's P&L database to generate large data sets (~75 million rows) containing financial transaction details. Leveraged PowerBI to analyze data sets, identifying over 700 (of the ~2100) expense accounts in Microsoft's Chart of Accounts (CoA) that can be blocked.
- Synthesized findings from CoA analysis into an article detailing CoA optimization efforts, read by over 5000 Microsoft employees and received 100% positive feedback.
- Conducted external research on ideal CoA designs and developed a framework that will be used in future Microsoft CoA designs.
- Drafted a user guide detailing how Localization accounts capture costs. The FDM team has adopted my user guide as a template.
- Built a new SharePoint site that contains all budget-related information, including restatements. This site has been implemented by Microsoft and will drive improved process, resources, and communication of all budget-related information.

erth.io – Live at <http://erth.io>

Software Developer

March 2018 – Present

- Worked on implementing new frontend visuals, including integration with backend code, and helped manage server deployments.
- Fine-tuned custom physics engine and implemented new gameplay features that were pushed to production.
- Fixed leaderboards by updating queries to MongoDB database containing player data.
- Actively marketed the game, reaching 200,000+ unique new visitors and obtaining sponsorship by addictinggames.com.

Microsoft China

Finance Intern

Beijing, China

Jun 2017 – Aug 2017

- Prepared monthly financial statement reports for Microsoft China legal entities to help drive the balance sheet (BS) review process.
- Analyzed movements of accounts payable, accrued expense, and fixed assets. Results presented to Asia CFO during BS review.
- Reviewed statutory audit reports and P&L statements to determine current trends and provide commentary for BS review.
- Analyzed accounts receivable aging analysis, categorizing overdue receivables for Surface and service sectors.

University of California, Berkeley

Undergraduate Researcher (under Professor Clayton Critcher)

Berkeley, CA

Feb 2017 – Aug 2018

- Conducted over 300 hundred research experiments (10 hours/week for 3 semesters) in the Behavioral Lab on consumer behavior and assisted in developing 11 research reports (e.g., product star ratings, base rate neglect, prevalent fallacy).
- Used Qualtrics software and Excel Pivot Tables to analyze experimental data and flagged suspicious data from the data sets.

Leadership Experience

Berkeley Business Club

VP of Finance

Sep 2016 – May 2018

- Provided weekly financial market updates to members and led 12 finance committee meetings over the course of the semester.
- Developed and implemented a new curriculum for finance members, covering topics in financial modeling and investing.

Skills

Experienced: Python, Java, Excel, PowerBI, SharePoint

Familiar: C++, NumPy, SQL, Bloomberg terminal

Certifications: Bloomberg Certification Program