Duanchen Liu

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EDUCATION

Boston College, Chestnut Hill, MA

Aug. 2016 – Dec. 2019

B.A. in Computer Science and Applied Psychology, Overall GPA: 3.939, Rank: 4/177

• Summa Cum Laude & Alpha and Omega Honor Society & First Honors, Dean's List (all semesters)

WORK EXPERIENCE

Technology Consultant - Cloud, Data & AI, EY, Boston, MA

Sept. 2020 – Present

- Applied expertise in ML to an inventory optimization project for a Global Fortune 50 retail pharmacy; Developed PySpark code in Databricks to run simulation and cut run time from 5 hours to ~30 minutes; Efforts resulted in a \$180 Million in working capital savings for the client
- Designed and implemented data re-platform solutions to move event data into Azure Data Lake Storage Gen 2; Created reporting views within Azure Synapse and consumed in Power BI for data visualization
- Coordinated Azure and Databricks partners training courses for the EY Microsoft team of 150+ people; Wrote technical whitepaper for topics including Azure Auto ML, Azure Synapse, Azure Dataflow, and Power BI
- Led 50+ internal workshops and initiatives (practice development, learning champion, project pursuits)

Research Assistant, Dept. of Computer Science, Boston College, Chestnut Hill, MA

Mar. 2020 – Present

- Conducted research in NLP focusing on pragmatic expression in adults with autism spectrum disorder
- Annotated conversation utterances for features (politeness, uncertainty, informativeness, speech acts); Identified distinctive pragmatic features of ASD; Developed neural models to predict features and yielded higher accuracy than previous approaches (with F1 exceeding 0.82 for politeness, uncertainty, informativeness)
- Presented research poster in INSAR 2021; Published paper in ACL-IJCNLP SRW 2021

Teaching & Lab Assistant, Dept. of Computer Science, Boston College, Chestnut Hill, MA

Dec. 2018 – Dec. 2019

• Selected by the Computer Science department to act as a salaried assistant to Professors through tutoring session for the Logic and Computation course; Led Computer Organization labs with 15+ students.

Advisory Consultant Program Intern, EY, Boston, MA

Jun. 2019 – Aug. 2019

• Supported the Customer Experience team of 10+ people in research and presentations; Led client meetings and consolidated meeting minutes; Designed a Digital Lab strategy for a Global Fortune 200 agricultural conglomerate; Helped formulate a strategy for next generation of growth in Digital Commerce across the client's businesses

Compliance Department Intern, MediaTek, Woburn, MA

Jun. 2018 – Aug. 2018

- Simplified risk assessment process by creating online questionnaire to maximize efficiency
- Evaluated 15 companies' survey systems and ultimately saved money by choosing the in-house system
- Developed 20-page instruction manual for the official company survey system
- Collaborated with IT to present compliance department's needs to make decisions regarding in-house system

Marketing & Strategic Relationship Analyst Intern, BrainCo Inc., Somerville, MA

Apr. 2018 - Aug. 2018

- Worked with team of 20+ to write business plans and official company brochure to present to investment companies
- Helped identify potential new clients: presented company's product to CEO of one of the biggest education agencies in China; Named Outstanding Intern (among 15 interns) by the marketing department

Police Cadet, Lexington Police Department, Lexington, MA

Jun. 2017 – Aug. 2019

- Prepared and tabulated figures for statistical purposes; maintained and filed records; operated office machines
- Enforced parking regulations by patrolling community and writing tickets

LEADERSHIP EXPERIENCE

President, Women in Computer Science, Chestnut Hill, MA

Aug. 2018 – Dec. 2019

- Updated mission statement to emphasize support and collaboration; Implemented team-based restructuring to improve efficiency; Organized Eboard meetings every two weeks to reflect and to plan for coming weeks
- Collaborated with companies and other school clubs on information sessions, speaker series, and workshops

Mentor & SAT Tutor, Let's Get Ready, Tufts University, Medford, MA

Jun. 2017 – Aug. 2017

- Supported a group of 7 students in raising their SAT scores an average of 50 points over the course of 3 months
- Conducted college counseling to guide students through application, financial resources, and future plans

Founder & President, Tracks Acappella Group, Beijing, China

Sept. 2015 – Sept. 2016

- Founded my high school's first acappella group (15 students); Held charity auction concerts with 5 others schools
- Became the 1st student group in 100 years to win the title of *Top Ten Clubs* in school in its first year

EXTRACURRICULAR ACTIVITIES

Arts Committee Chair, Campus School of Boston College, Chestnut Hill, MA

Sept. 2017 – Aug. 2018

• Organized musical and theatrical entertainment and secured 5 sponsors for holiday parties and arts show

Soprano Singer, University Chorale of Boston College, Chestnut Hill, MA

Sept. 2016 – Present

• Performed 40+ songs at Pops on the Heights, Fall Concert, Christmas on the Height, and Winter Concert

Piano Player Jan. 2003 – Present

• Highest level in Chinese Musicians Association; played solo at pianist, Chen Qi's recital, with 1000+ audience

SKILLS

- Technical: Python; Spark; Java; C; JavaScript; HTML; d3.js; SQL; DAX; Tableau; Power BI; Databricks; Azure
- Languages: Chinese Mandarin (native); English (fluent); Spanish (basic)
- Certificate: Azure Fundamentals, Azure Data Fundamentals
- Patent (in China): Mobile Application UI Design (QR code on the right)

