

# Duanchen Liu

Github: duanchenliu • duanchen.liu@gmail.com • 617-806-6967 • <https://duanchenliu.github.io/>

## Education

**Boston College**, Chestnut Hill, MA 08/2016 – 12/2019  
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 09/2020 – present  
• Applied expertise in machine learning 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, with team 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 03/2020 – present  
• Conducted research in NLP focusing on pragmatic expression in adults with autism spectrum disorder  
• Annotated conversation utterances for language features, identified distinctive pragmatic features of ASD, developed neural models to predict features and yielded higher accuracy than previous approaches

**Teaching & Lab Assistant**, Dept. of Computer Science, Boston College, Chestnut Hill, MA 12/2018 – 12/2019  
• 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 06/2019 – 08/2019  
• 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 06/2018 – 08/2018  
• Simplified risk assessment process by creating online questionnaire to maximize efficiency  
• Developed 20-page instruction manual for the official company survey system  
• Collaborated with IT to build in-house risk assessment system incorporating compliance department's needs

**Marketing & Strategic Relationship Analyst Intern**, BrainCo Inc., Somerville, MA 04/2018 – 08/2018  
• Wrote business plans and official company brochure with a team of 20+ to present to investment companies  
• Identified new clients: presented company's product to CEO of one of the biggest education agencies in China

**Police Cadet**, Lexington Police Department, Lexington, MA 06/2017 – 08/2019  
• Tabulated figures for statistical analysis, supported 200+ incidents, organized community events, patrolled community  
• Created profiling handbook for disabilities and mental illnesses to identify needs of different groups of people

## Leadership Experience

**President**, Women in Computer Science, Chestnut Hill, MA 08/2018 – 12/2019  
• 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

**Arts Committee Chair**, Campus School of Boston College, Chestnut Hill, MA 09/2017 – 08/2018  
• Organized musical and theatrical entertainment and secured 5 sponsors for holiday parties and arts show

**Mentor & SAT Tutor**, Let's Get Ready, Tufts University, Medford, MA 06/2017 – 08/2017

- 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 A Cappella Group, Beijing, China 09/2015 – 09/2016  
• Founded my high school's first a cappella group (15 students), held charity auction concerts with 5 others schools  
• Became the 1<sup>st</sup> student group in 100 years to win the title of *Top Ten Clubs* in school in its first year

## Publications

- C. Yang, **D. Liu**, Q. Yang, Z. Liu, and E. Prud'hommeaux. Predicting pragmatic discourse features in the language of adults with autism spectrum disorder. In 2021 ACL & IJCNLP joint conference SRW
- C. Yang, **D. Liu**, A. Canfield, et al. Distinctive features of pragmatic expression in adults with autism spectrum disorder. In 2021 Annual Conference of the International Society for Autism Research

## Extracurricular Activities

- Piano Player: highest level in Chinese Musicians Association, played at Chen Qi's recital with 1000+ audience
- Soprano Singer: lead singer in Beijing Jinfan Choir, performed with Boston Pops Orchestra at philanthropy concerts

## 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, Azure AI Fundamentals
- Patent (in China): Mobile Application UI Design (QR code on the right)

