

LEON LEI

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EDUCATION

Brown University Sc.B. and Master's in Computer Science (4-year Concurrent Program) **May 2020**

- **GPA:** 3.82 (Degree), 3.76 (Cumulative)
- **Relevant Coursework:** Artificial Intelligence, Deep Learning, Machine Learning, Computer Vision, Interactive Computer Graphics, Data Science, Collaborative Robotics, Software Engineering, Creating Modern Web Apps, Design/Impl. of Programming Languages, Design/Analysis of Algorithms, Discrete Structures/Probability, Statistics, Linear Algebra, Computer Systems, Game Theory and Economics

TECHNICAL SKILLS

- **Programming:** Java, Python, JavaScript (ES6), C, C++, C#, R, TensorFlow, PyTorch, MATLAB
- **Web/Database:** HTML, CSS, Ajax, Node.js, React.js, D3.js, jQuery, SQL, MongoDB, AWS S3 and EC2
- **Other Tools:** Linux/Unix, Windows, MacOS, Git, Unity, Eclipse/IntelliJ, Qt Creator, Microsoft Office

EXPERIENCE

Software Dev Engineer Intern *Amazon.com* *Seattle, WA* *05/2019 - 08/2019*

- Drove the development of a new debugging tool to support quick access to API data from shipping and tracking services, making it easier and at least 3x faster for engineers to get the data they need
- Implemented, reviewed, and shipped code in **Java** and **JavaScript**, followed scrum agile methodology
- Delivered results in a timely fashion and contributed separately to the Video on Delivery project afterwards

[Head] Teaching Assistant *Brown University CS* *Providence, RI* *08/2018 - present*

- Fall 2019 HTA for CS1410 **Artificial Intelligence**, leading 18 TAs in updating and running the course
- Spring 2019 TA for CS1320 **Web Apps**; Fall 2018 TA for CS1410 **Artificial Intelligence**
- Revamped course materials and assignments while working closely with other TAs and professors
- Offered weekly guidance to students at TA hours and on Piazza with conceptual questions and debugging

Data Science Intern *Roche (Genentech)* *New York, NY* *05/2018 - 08/2018*

- Developed a visualization tool with **R Shiny** and **D3.js** for Roche analysts looking at patient journeys
- Processed large amounts of real-world patient data, producing optimizations in **R** with ~40x speedup
- Generated visualization trees to assist researchers with an XGBoost machine learning use case
- Presented work via teleconference to Roche's global leaders in real-world data and visual analytics

Research Intern (REU) *University of Miami* *Coral Gables, FL* *05/2017 - 07/2017*

- Studied effects of language on children's social ties using data from positional and auditory sources
- Created data processing tools and visualizations with **C#** and **MATLAB**; Final poster: goo.gl/25aZvG
- Authorship on presentations given at conferences/meetings in Philadelphia, Norwich, Amsterdam, etc.

LEADERSHIP/ACTIVITIES

- Researcher in Visual Computing Lab (2019) – *working on a generative model of house-scale floor plans*
- Secretary of Brown CSA (2018-2019) – *managed forms and documents, planned and organized events*
- Programmer in Brown-RISD Game Developers (2017-present) – *built games with C# and Unity*
- Treasurer of Brown Go Association (2017-present) – *secured funds and promoted the organization*
- **Other:** MAPS Program Mentor, Learning Exchange Facilitator, Post- Magazine Writer, Chamber Violinist

PROJECTS

- ABOT Website Redesign (abotdatabase.info) – *for Brown's Humanity Centered Robotics Initiative*
- PickPoker – *a multiplayer poker web app with custom game rules developed in Java and JavaScript*
- ROS-enabled Teleoperation with the HoloLens – *research project on interfacing between robots and AR*
- Granny and Squirtsworth – *developed with C# and Unity, play it at this link! tinyurl.com/yxgmn8am*
- Hack@Brown 2017 & 2018 – *developed concepts and prototypes of two respective social apps*

AWARDS/HONORS

- Mu Alpha Theta (Math Honor Society) Scholarship (2016) – awarded to ~50 students in the US
- American Go Foundation College Scholarship (2014) – awarded to 2 students in the US