

LYNN (DEREK) LEE

(603)-305-4643 | lynn.lee.1@vanderbilt.edu | [linkedin.com/in/derek00111](https://www.linkedin.com/in/derek00111) | dereklee.site

EDUCATION **Vanderbilt University, Nashville, TN** Expected May 2022
B.E., Chemical and Biomolecular Engineering GPA: 3.76/4.00
Double Minor: Computer Science, Chemistry Dean's List: All semesters

EXPERIENCE **ExxonMobil** Jun 2020 - Aug 2020

Data Science Intern

- Built Python web scraper to automate daily data collection from online public sources for ETL pipeline and exposed collected data via restful API
- Leveraged Python, MongoDB, Openshift, and XGBoost to create & deploy predictive machine learning web application, reducing barge operations by \$350,000/year
- Designed and programmed dynamic price guidance model and user interface for global business and sales teams use with Python and Dash

Vanderbilt University, Laboratory of Prof. Ethan Lippmann Jan 2019 - Present

Undergraduate Research Assistant in Chemical Engineering Dept.

- Optimize production of flat polyacrylamide gels from 50% to 90% by experimenting with shorter polymerization times to minimize gel curling
- Culture millions of human stem cells (iPSCs) and differentiated them into brain microvascular endothelial cells (BMECs)
- Investigate the effects of actin stress fibers on the human blood-brain barrier in an effort to stop and reverse the effects of neurodegenerative disorders like Alzheimer's

Vanderbilt University Data Science Institute Aug 2020 - Present

Undergraduate Data Scientist

- Analyze 18,000 class action lawsuit documents, and continuous and categorical variables of interest in lawsuits to better determine fair attorney compensation
- Train Python natural language processing models to verify importance of variables

LEADERSHIP **Vanderbilt University Student Volunteers for Science** Sep 2018 - Present

Secretary of Media and Documentation

- Coordinate outreach events in the Nashville metro area for 500+ student volunteers
- Organize and update 500+ lesson manuals used by volunteers each semester
- Lead mini science lessons in weekly visits to public school classes of 30+ students
- Direct weekly news to student volunteers through emails and social media posts

SKILLS **Programming and Computer Science**

- Python, C++, MATLAB, Java, HTML, CSS, ASPEN+, Dash

Data Analytics

- Optimization, Machine Learning, Openshift Container Platform, MongoDB Databases