

Sean Chew

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Education

Columbia University | New York, NY

May 2023

M.S. in Urban Planning, concentration in Urban Analytics and Built Environment

Dual Degree, Georgia Institute of Technology and Emory University | Atlanta, GA

Dec 2018

B.S. in Electrical Engineering; B.A. in Mathematical Economics, Music Minor

Georgia Tech GPA: 3.74/4.00 (*Highest Honors*) | Emory GPA: 3.71/4.00

Work Experience

US Department of Transportation Volpe Center – *Data Scientist Student Trainee* | Cambridge, MA Jun 2022 – Present

- Spearhead tool development to allocate federal funding for 500,000 electric vehicle chargers across the US
- Using Python, R, Tableau, and PowerBI, create platform for cities and states to conduct scenario analysis of different transportation policies and measure effects on transportation system performance and emissions

New York City Mayor's Office of Climate Resiliency – *GIS Intern* | New York, NY

Jan 2022 – May 2022

- Use geospatial analytic techniques in R and ArcGIS to identify at risk communities and inform policy recommendations and apply for FEMA grants
- Design public-facing information and collaborate with city agencies and community groups

Columbia University – *Graduate Research Assistant* | New York, NY

Aug 2021 – May 2022

- Conduct big data and machine learning mixed-method research with Dr. Boyeong Hong on environmental e-democracy for the 2022 Association of Collegiate Schools of Planning (ACSP) Conference
- Conducted archival research supporting Dr. Lance Freeman's courses on urban planning website, Planetizen, regarding gentrification, urban renewal, eminent domain, environmental injustice, and poverty

The Brattle Group – *Research Analyst* | Washington, D.C.

Jul 2019 – Aug 2021

- Used Excel, R, and Python to build economic and statistical models and data visualizations using large datasets, informing sustainable policy and business decisions on fast-paced consulting projects
- Design outreach materials through data analysis and visualization to increase visibility of company expertise
- Fostered junior analyst growth as a teaching assistant (TA) for data analysis, manipulation, and visualization techniques using Excel and R while supporting new hire transition to company culture

Eaton Corporation – *Power Systems Engineering Intern* | Philadelphia, PA

Jun 2018 – Aug 2018

- Helped clients' electrical systems operate more reliably, efficiently, and safely through power systems studies involving short circuit, device coordination, and arc flash studies

Skills/Languages

Data and Research Skills:

- Strong background in qualitative and quantitative research, including data analysis using Excel, R, Python, ArcGIS, SQL, Tableau, and PowerBI

Industry Knowledge:

- Comprehensive knowledge of wholesale energy market economics, power systems engineering, and urban planning history and theory

Programming Skills:

- Coursework or industry experience using R, Python, HTML, SQL, Java, MATLAB, C++, C, VHDL, C#, and VBA

Soft Skills:

- Strong empathetic, communication, and leadership skills, including conflict mediation, counseling, presentation, relationship building, public speaking, self-management, and crisis management

Design Skills:

- Ability to use design software and Adobe Creative Cloud products, including InDesign, Illustrator, and Sketchup

Languages:

- Conversational in Mandarin Chinese

Volunteering and Community Engagement

GreenSAPP – Co-Chair

Aug 2021 – Present

- Promote a greater emphasis on and engagement with the topic of climate change in the curriculum and student life at GSAPP

Emory Engineering Society - Founder and President

Jan 2015 – May 2016

- Founded organization to support students pursuing engineering at Emory University by strengthening ties with Georgia Tech and creating a network within Emory's prospective engineers
- Organized large scale networking dinner that featured talks from Emory President and faculty to inspire students pursuing engineering in the liberal arts

Emory University, Office of Residence Life – Resident Advisor | Atlanta, GA

Aug 2014 – May 2016

- Facilitated community, advising, and mentorship for residents of diverse sustainability themed first-year residence hall through educational programs, meetings, and community building activities
- Won the Charles White III Sophomore Advisor of the Year award for strong commitment to supporting residents and building community in residence hall

TrickaNomeTry (TNT) Hip Hop Dance Team - Co-Captain

Jan 2014 – May 2016

- Led biweekly rehearsals, fostered team morale, taught public dance classes
- Performed at large scale Emory and Atlanta-wide arts events and competitions
- Led TNT to the international dance competition: World of Dance, Atlanta

Awards

Avery Scholar Recipient at Columbia University (2021)

- Recipient of annual \$40,000 partial tuition scholarship to attend Columbia University's Urban Planning program in Fall 2021

Faculty Honors (2018)

- Recognizes superior scholarship of Georgia Tech undergraduate students achieving an academic average of 4.00 while completing a schedule of at least 12 hours of coursework on a letter-grade basis

Georgia Tech and Emory Dean's List (2013, 2016-2018)

- Recognizes excellent student achievement undergraduate students maintaining high cumulative GPAs

IEEE Power Energy Society (PES) Scholarship Recipient (2018)

- Recipient of the scholarship supporting promising electrical engineering students pursuing careers in the energy sector

IEEE Eta Kappa Nu International Electrical and Computer Engineering Honor Society (2017)

- Member of honor society for Electrical and Computer Engineers by the Institute of Electrical and Electronics Engineers (IEEE), recognizing students in electrical engineering, computer engineering, and computer science

Omicron Delta Kappa National Leadership Honor Society (2016)

- Nominated member of national honor society recognizing significant academic achievement and leadership

Omicron Delta Epsilon National Honor Society in Economics (2016)

- Nominated member of national economics honor society, recognizing outstanding economic achievement

Emory 100 Senior Honorary (2016)

- Awarded to Emory students who are deeply committed to interests, made outstanding contributions to Emory campus through leadership

Emory University Sustainability Case Competition – Second Place and Best Presenter (2015)

- Second place winner of Emory's unique multidisciplinary case competition bringing together students working together to find solutions to solve sustainability's thought-provoking issues

Charles White III Sophomore Advisor of the Year (2015)

- Awarded by the office of Residence Life and Housing to sophomore advisors who are strongly committed to supporting residents and building community in residence hall

Interests

Cities, urbanism, transportation, community engagement, interior design, sketching, biking, hip-hop dance, classical violin, pastel art, gouache painting, tennis, martial arts