AUSTIN D. SNYDER

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EDUCATION

Chapel Hill, NC   **University of North Carolina-Chapel Hill**   **Aug 2018 - May 2022**
- **GPA:** 3.79
- **Majors:** Computer Science, Environmental Science
- **Minor:** Physics
- **Coursework:** Data Structures, Computer Organization, Web Programming, Files & Databases, Algorithms & Analysis, Machine Learning, UI/UX Design, Software Engineering
- **Honors/Awards:** Carolina Laureate, Carolina Research Scholar, Phi Beta Kappa
- **Programming Skills:** Python, R, C#, Java, JavaScript, TypeScript, HTML/CSS, PHP, SQL, SAS, Visual Basic

EMPLOYMENT

Research Intern   **Florida Atlantic University**   **Jun 2021 - Dec 2021**
- Developed Python, R, and MATLAB algorithms to optimize the design of ocean current turbines using control co-design methodology
- Optimization methods often utilized dynamic programming with application of linear programming
- Computationally-expensive aspects of the design were optimized through supervised machine learning processes

Research & Development Intern   **National Renewable Energy Laboratory**   **Summer 2020**
REopt (https://reopt.nrel.gov/): Techno-Economic Decision Platform
- Developed Python and R algorithms to collect and analyze data on the geographic viability of natural gas power, presenting results in the form of a paper & poster at a conference
- Augmented and tested REopt Lite using a RESTful API, as well as writing & publishing API documentation
- Collaborated with a team of other developers using Git

Software Development Intern   **SAM Analytic Solutions**   **Jul 2018 - May 2019**
- Debugged and augmented monitoring and security systems alongside the head security engineer
- Developed web application to track users' login locations, notifying network administrators of suspicious activity
- Worked with a team of developers to create a web application monitoring the output of solar panels in solar farms, notifying overseers with exact locations of panels in need of repair
- Partnering with the Environmental Protection Agency, created a novel search engine for parsing "dirty" text files through the application of natural language processing

CAMPUS ACTIVITIES & PROJECTS

Renewable Energy Special Projects Committee, *Co-Chair & Project Leader*   **Sep 2018 - Present**
- Conducted research and data analysis on behalf of students, faculty, and staff to design renewable energy, energy efficiency, and energy education projects on campus
- Reinstated an energy reduction competition and coordinated bringing the first electric bus to our town's fleet
- Documented the history of UNC energy projects and built a transparent administrative structure for project funds

Executive Undergraduate Student Government, *Student Body Executive Secretary*   **Sep 2018 - Apr 2021**
- Identified areas of campus policy without institutional support and instituted structures and projects to fill gaps
- Modified campus dining services to support plant-based diets, as well as created a "green certification program"
- Advocated for contextualization of campus history and created a class for campus organization leaders
- Oversaw and developed policy for the entirety of student government and served as primary public communicator