Anthony E. Lyons

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EDUCATION

The George Washington University, Washington, DC   May 2015
Bachelor of Science, Mechanical Engineering - 3.2/4.0 GPA, KΣ Alumnus

Korea University, Seoul, South Korea   Feb. 2013-June 2013

CERTIFICATION

Association of Energy Engineers, Atlanta, GA   May 2015
Energy Manager in Training (E.M.I.T.) - C.E.M Track

WORK EXPERIENCE

Georgetown University Department of Energy and Utilities, Washington, DC   June 2016-Present
Operations and Maintenance Engineer
- Ensure safe and uninterrupted distribution of steam, domestic water, chilled water, and high-voltage utilities
- Develop and oversee projects to increase operational and energy efficiency, and reduce carbon emissions
- Manage and coordinate utility maintenance throughout 103 acres of land and 7 million ft^2 of building space
- Optimize controls programs using Automated Logic for science, medical, residential, and athletic facilities

Clark Construction, LLC, Washington, DC   June 2015-June 2016
Office Engineer at The Smithsonian National Museum of African American History and Culture
- Tracked material installation, building commissioning, and permitting for a $400 million federal project
- Project financial management including change order tracking, billing projections, and labor cost analysis
- Field coordination between architects and subcontractors for plumbing, electrical, and landscape work
- Project lead for "Green Trailer" designing energy efficient trailers to reduce energy and operations costs

GWU Smart Systems, LLC, Washington, DC   June 2014-May 2015
Undergraduate Researcher
- Developed a path planning algorithm for a long-distance autonomous robot charged by PV cells
- Prototyped the robot platform using AutoCAD, and Solidworks
- Presented research slideshows to professors and judges for research competitions

Pedal Forward, LLC, Washington, DC   May 2014-May 2015
Manufacturing Intern
- Refined the process plan to minimize cost for bamboo bike manufacturing
- Manufactured and modeled plastic, metal, and bamboo bike parts with CNC machines and Solidworks
- Compared costs of manufacturing methods to ensure rapid, consistent, and cost-effective product delivery

PROJECTS

Microbial Fuel Cell Energy Capture from Swine Waste, *Senior Capstone*   Oct. 2014-May 2015
- Collected swine wastewater samples in order to measure toxicity, acidity, and organic content
- Implemented a microbial fuel cell to generate electricity from bacterial interactions
- Projected energy generation and savings for system implementation on a farm-level scale

Florida Home Energy Retrofit, *Advances in Energy Engineering*   Jan. 2015-Mar. 2015
- Collected energy consumption data from federal, utility, and local sources to generate energy use projections
- Analyzed the life-cycle cost and energy savings of building envelope, material, and MEP system changes
- Calculated which new systems or changes to old systems would create the most dollar and/or energy savings

Offshore Wind Farm Analysis, *Advances in Energy Engineering*   Jan. 2015-Mar. 2015
- Gathered energy consumption data for of VA and MD to model power plant greenhouse gas emissions
- Analyzed civilian and military shipping traffic throughout the Chesapeake bay to select wind farm location
- Used data from NOAA to select turbine size and orientation to ensure adequate power generation to replace existing power plants

SKILLS

- **Technical**: AutoCAD, Solidworks, Microsoft Office, Navisworks, Bluebeam, and Automated Logic
- **Languages**: Korean coursework from The King Sejong Institute at the Korean Embassy in Washington, DC