

## EDUCATION

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<b>Virginia Polytechnic Institute and State University</b> <i>Doctor of Philosophy in Civil Engineering</i>	<b>May 2024</b> GPA: 3.90/4.0
<b>Virginia Polytechnic Institute and State University</b> <i>Master of Public Health</i>	<b>May 2023</b> GPA: 3.90/4.0
<b>Virginia Polytechnic Institute and State University</b> <i>Master of Science in Environmental Engineering</i>	<b>December 2021</b> GPA: 3.90/4.0
<b>University of Illinois at Urbana-Champaign</b> <i>Bachelor of Science in Civil Engineering</i>	<b>August 2019</b> GPA: 3.67/4.0
<b>University College London</b> <i>Exchange student, Department of Civil &amp; Environmental Engineering</i>	<b>Fall 2018</b>

## FELLOWSHIPS

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<b>Rural Environmental Health Fellowship</b> <i>Global Change Center; Virginia Polytechnic Institute &amp; State University</i>	<b>2021-2022</b>
<ul style="list-style-type: none"><li>• Awarded to PhD students pursuing research focused on rural environmental health</li><li>• Used to support interdisciplinary activities that advance research at the nexus of environmental health sciences in rural settings</li></ul>	
<b>Via Fellowship</b> <i>Department of Civil &amp; Environmental Engineering; Virginia Polytechnic Institute &amp; State University</i>	<b>2019-2023</b>
<ul style="list-style-type: none"><li>• Awarded to prospective graduate students nominated by faculty in civil &amp; environmental engineering</li><li>• Based on academic merit and Ph.D. potential</li></ul>	
<b>AAUW Selected Professions Fellowship</b> <i>American Association of University Women</i>	<b>2019-2020</b>
<ul style="list-style-type: none"><li>• Awarded to women who intend to pursue a full-time course of study in one of the designated degree programs where women's participation traditionally has been low.</li><li>• Based on academic excellence, potential as a practicing professional, and promise as a role model in new and nontraditional fields of study, research or practice.</li></ul>	

## RESEARCH INTERESTS

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Through past and current work, my research has largely been focused on investigations into the intersection of environmental engineering and public health and serving local and global communities by improving access to safe water and sanitation. Currently, I am interested in the efficacy of rural drinking water systems in relation to health outcomes in the Appalachian region of the United States. In future work, I hope to further investigate approaches to mitigate environmental exposures to contaminants in drinking water.

## RESEARCH

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<b>Research Assistant</b> <i>Department of Environmental Engineering, Virginia Tech</i>	<b>Blacksburg, VA</b> Spring 2020-present
<ul style="list-style-type: none"><li>• Conducted systematic review and meta-analysis on the relationships between drinking water quality and associated health outcomes in the Appalachian Region of the U.S.</li></ul>	
<b>Undergraduate Research Assistant</b> <i>Department of Environmental Engineering, University of Illinois at Urbana-Champaign</i> <i>Advisor: Dr. Megan Konar</i>	<b>Champaign, IL</b> Spring 2019
<ul style="list-style-type: none"><li>• Developed literature review and technical report analyzing the impact of social networks on household food sharing and natural resource management in regions of Zambia affected by prolonged droughts.</li></ul>	
<b>Water Treatment Research Assistant</b> <i>Construction Engineering Research Laboratory, USACE</i>	<b>Champaign, IL</b> February 2019- August 2019
<ul style="list-style-type: none"><li>• Researched application of water reuse systems to address water scarcity in Army installations.</li><li>• Designed shower head and water storage tank for mobile hygiene systems reusing grey water.</li><li>• Analyzed and interpreted lab results from water sample field data taken from mobile hygiene system.</li></ul>	

**University College London****London, U.K.***Undergraduate Research Assistant; Advisor: Dr. Luiza Campos*

Fall 2018

- Researched mobile phone applications and databases to support decentralized closed-loop water systems.
- Identified parameters for modeling and mapping data on water-waste-energy-food nexus in rural areas.

**TEACHING & MENTORING EXPERIENCE**

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**Teaching Assistant****2019-2020***Department of Civil Engineering, Virginia Tech*

- Held weekly office hours, assisted students with assignments, and graded papers and exams
- Explained challenging concepts using planned lessons and assignments for 50 undergraduate students each semester

**Graduate Mentor****Summer 2020**

- Provided advice and individually assisted undergraduate students with research opportunities
- Mentored two undergraduate students in data collection and analysis for systematic review paper
- Guided the students in preparation and presentation of research findings

**LEADERSHIP & VOLUNTEER EXPERIENCE**

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**Chapter President, Virginia Tech VWEA/ VA AWWA Chapter****January 2021-present**

- Facilitated professional development and service events with the national and regional AWWA chapters
- Led outreach events for new graduate students and bi-monthly group meetings
- Organized and moderated opportunities for current students and alumni to present individual research

**Ambassador, Women in Engineering at University of Illinois****January 2017-May 2017**

- Educated prospective students and their families visiting the University of Illinois on admissions information, financial aid, housing, and registered student organizations on campus
- Communicated with admitted women engineering transfer students on engineering at Illinois

**Information Sessions Coordinator, Engineering Employment EXPO at UIUC****January 2017-May 2017**

- Directed and assisted recruiters and students with event logistics
- Guided over 400 companies through one of the largest career fairs in the country and served as their personal coordinator throughout the three-day event
- Coordinated room locations and times for companies interested in hosting information sessions on campus

**HONORS & AWARDS**

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**Reece Scholarship****2019-2020***Kappa Alpha Theta, University of Illinois at Urbana-Champaign***Sargent & Lundy Scholarship****2019-2020***College of Engineering; University of Illinois at Urbana Champaign***Illinois Engineering Achievement Scholarship****2018-2019***College of Engineering; University of Illinois at Urbana-Champaign***Maren Somers Memorial Engineering Scholarship****2018-2019***Department of Civil & Environmental Engineering, University of Illinois at Urbana-Champaign***PROFESSIONAL EXPERIENCE**

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**Engineering Enterprises Inc.****Sugar Grove, IL***Civil Engineering Intern*

Summer 2018

- Monitored construction site progress, aided with treatment design, and prepared documentation of progress for the phosphorus removal upgrades at the Wastewater Treatment Plant in Huntley, IL.
- Aided with field work and report writing for 10+ municipality projects in Northern Illinois.

**Freepport McMoran Inc.****Green Valley, AZ***Project Engineering Intern*

Summer 2017

- Identified air sparger size impact on mineral grade and recovery using applied statistics research and presented findings at annual intern conference.
- Prepared and handled 30+ mill samples in the laboratory to determine their mineral components.

## **CERTIFICATION & SKILLS**

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### **Engineer in Training (EI/EIT)**

December 2019

- Passed the NCEES Fundamentals of Engineering test

**Programming languages:** MATLAB, R, LaTeX

**Computer aided design/engineering:** AutoCAD, HEC-RAS

**Other:** Microsoft Office

## **REFERENCES**

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### **Dr. Alasdair Cohen, Assistant Professor**

*Department of Population Health Sciences*

Virginia Polytechnic Institute & State University

(540) 231-2010, agcohen@vt.edu

### **Dr. Amy Pruden, W. Thomas Rice Professor**

*Department of Environmental Engineering*

Virginia Polytechnic Institute & State University

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