



# Robbie Venis

## SUMMARY

My name is Robbie Venis, and I am a PhD student of Environmental Engineering at Carleton University. My research focuses on the development and optimization of a low-cost water treatment technology for application in rural settings in Low-Income Countries. I am a firm believer in the benefits of taking a multi-disciplinary approach to address a given challenge, and I am fundamentally a reductionist problem-solver.

## EXPERIENCE

### Teaching Assistant, Carleton University

Ottawa, Ontario (September 2016- Current)

Since September 2016, I am a Teaching Assistant for the Civil and Environmental Engineering Department at Carleton University. I have worked with students in four different courses at different undergraduate levels.

### Research Assistant, Vishwakarma Institute of Technology

Pune, Maharashtra, India (2015)

Over the summer of 2015, I worked on the "Reinventing the Toilet Challenge" funded by the Bill and Melinda Gates Foundation. Located at VIT College in Pune, India, I was given the opportunity to work alongside Indian professors to research and design a disinfection system for a *zero-water-consumption* and energy independent toilet system. This experience not only drastically increased my knowledge and understanding of the subject matter, but allowed me to have hands on experience with research and design in a developing country.

### Engineering Drawings Technician, Graphic Printing Roller

Markham, ON (2014)

During the summer of 2014, I worked for the same manufacturing company as in the previous year. However, during this summer I worked with design programs such as Solid Edge and AutoCad Inventor to design the products of the company. During this period I became quite proficient with the technology, and learned how to work under very tight deadlines.

### Special Operations Coordinator, Graphic Printing Roller

Markham, ON (2013)

Over the Summer of 2013, I worked for a manufacturing company named 'Graphic Printing Roller' as the special operations coordinator. While there, I performed a series of analyses of the company's productivity, and developed a new system to optimize their time-cost ratio, as well as minimize scrap costs. Therefore, I worked closely with the CEO, sales team, Operations Manager and Floor Manager to help create a more efficient methodology. At this position, I learned a lot about the skills necessary to be a successful manager, including open-mindedness and organization.

## EDUCATION

### Carleton University

Environmental Engineering, PhD — Expected Graduation Year: 2021

I am currently a PhD student at Carleton University, studying Environmental Engineering expecting to graduate in 2021. My thesis is on the development of a personal water purification system for a community in Tanzania. .

### Queen's University

Civil Engineering, BAsc — (2012 – 2016)

I completed my undergraduate degree at Queen's University, studying Civil Engineering with a specialization in Environmental Engineering. I was a Dean's Honours Recipient for the final two years of this degree.

## EXTRACURRICULARS

### Host, Editor and Operator, *All About Aid* Podcast and Blog

2017-present

In 2017, I started a podcast and blog called *All About Aid* (<https://allaboutaid.blog/>), that

focuses on social, political, environmental and scientific challenges facing the global community in the field of international development. Each episode is an interview with an academic or expert in a given field, during which we explore the ways in which to sustainably improve the lives of economically or socially disadvantaged individuals.

### **Director of Political Advocacy, Carleton University Engineers Without Border Chapter**

2016-2017

Engineers Without Borders (EWB) is a non-profit organization with a mandate to use engineering skills and philosophy to address pressing social challenges in Canada and abroad. Over the 2016-2017 school year, I worked as the Director of Political Advocacy at the Carleton University chapter, during which I worked with local politicians on developing policy that benefited under-represented communities in Canada in terms of water security.

### **India Project Manager, Queen's Project on International Development**

2015-2016

Queen's Project on International Development (QPID) is a student run non-governmental organization who works on development projects both locally and internationally. From April 2015, my role as India Project Manager was to manage student interns travelling to India to work in the summer of 2016. My responsibilities are cross-cultural training, critical thinking and problem-solving training, aid with fundraising efforts and overall support for the interns as they prepare for their departure.

### **Volunteer, International Student Volunteers**

Dominican Republic (2013)

During the summer of 2013, I travelled to a village in the Dominican Republic and taught kindergarten to the local children. Additionally, I designed and constructed a fully functioning outhouse for a group of seven families who had previously been sharing a single facility, as well as consulted the community on appropriate locations for other outhouses to be built after my departure. This experience greatly impacted my views on how to engage in international projects as a foreign agent, specifically in terms of community participation in project design.

## **AWARDS**

### **Queen Elizabeth Scholarship – Advanced Scholar**

April 2018 – August 2018

During the Summer of 2018, I was awarded the Queen Elizabeth Scholarship – Advanced Scholars (QES-AS), which afforded me the opportunity to travel to Tanzania to conduct research abroad. The scholarship provided a great opportunity to work very closely with academic, commercial and non-governmental partners in a collaborative and mutually beneficial way.

### **Ontario Graduate Scholarship**

May 2018 – May 2019

I was awarded the Ontario Graduate Scholarship (OGS) for the 2018-2019 term, which is provided to students that demonstrate academic excellence and leadership among their peers in the department at their university. I was awarded OGS for the Department of Civil and Environmental Engineering at Carleton University.

### **Dr. Thomas Betz Memorial Award for Intellectual Leadership**

October 2017

I was awarded the Dr. Thomas Betz Memorial Award for Intellectual Leadership, which is given to a single individual that demonstrates a multidisciplinary approach to their research and more broadly, intellectual pursuits beyond academia.

## **REFERENCES**

Available upon request.