

# Colton Bishop

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## Education

### Princeton University

Pursuing B.S.E. in Computer Science (GPA 3.7) with a certificate in Statistics and Machine Learning

Princeton, NJ, USA | September 2016-Present

### United World College of the Atlantic

Secondary School | International Baccalaureate Diploma

St. Donats, Wales, UK | Graduated May 2016

## Work Experience

### Software and Systems Engineer – Intern

Brown Brothers Harriman | Application Production Team

Boston, USA | June 2019- Present

- Proposed and developed MEAN-stack web application to collect, analyze, and visualize environmental performance data across offices; invited to present to senior leaders in the New York, Zurich, and Luxembourg offices.
- Developed Java scripts to automate the maintenance and testing of major firm-wide applications and web portals.
- One of three charged with overseeing the migration of legacy testing scripts to a new integrated platform.

### Software Engineer- Intern

Alquilando | Argentinian Real Estate Tech Startup

Buenos Aires, Argentina | June 2018- August 2018

- Proposed and built a Django-stack web app to automate contract generation, reducing process from 25 minutes to 5.
- Developed python API to scrape and analyze relevant market data and automate generation of comparative reports.
- Integrated ad campaign data streams with Google Data Studio and Cyfe to design interactive dashboards for analysis.

### iOS Mobile Developer- Intern

Environmental Protection Agency | Office of Digital Services and Technical Architecture

Washington D.C., USA | January 2018 – February 2018

- Updated the iOS version of the EPA's *HiveScience* Swift application by improving the form submission process and barcode scanning functionality and responding to user feedback with frontend updates and bug fixes.

### Undergraduate Researcher

Department of Computer Science | Princeton University

Princeton, NJ, USA | June 2017 – August 2017

- Led research initiative to reduce food waste on campus; developed Swift application to predict student eating habits.

## Selected Projects (To view full portfolio, please visit [bishopcolton.com/projects](http://bishopcolton.com/projects))

**Donatello:** TensorFlow Python application to transform 2D images into 3D models using a convolutional neural network.

- Developed a symmetry and topology-aware network that understands user descriptions of symmetry and shape.
- Built frontend Django web application and GUI for interactive user input and refinement of mesh-modeled images.

**Wengga:** web platform for the collection of data and generation of public neural translators for resource-scarce languages.

- Built attention-based sequence-to-sequence network optimized for low-resource translation between languages.
- Built 'gap-aware' Django web framework that prompts users to fill the most critical gaps in translated data corpus.

**Rype:** iOS application in Swift that tracks consumption habits and provides a sustainably prioritized list of potential recipes.

- Special focus on frontend development, OCR scanning, consumption analysis algorithm design, and recipe scraping.

**TigerTales:** a Django-based online marketplace for Princeton students looking to buy and sell textbooks.

- Special focus on backend database design, data scraping, search and sort functionality, and Heroku migration.

## Service

National Suicide Hotline and CONTACT Crisis Chat Volunteer

September 2017 – Present

Student leader for Princeton's Davis International Center and International Orientation

April 2017 – Present

STEM Tutor at Mountain View Youth Correctional Facility with the Petey Greene Program

January 2017 – Present

Princeton Disability Awareness Fair Volunteer Team

January 2017 – Present

Charity and Fundraising A Capella Performances with the Princeton Tigertones

September 2016 – Present

## Honors and Awards

**Semester at Sea Davis Scholar Grant Recipient-** recipient of a full scholarship to participate in the Fall 2018 voyage.

**U.S. National Committee UWC Grant Recipient-** recipient of full scholarship to study at UWC Atlantic College for two years.

**Eagle Scout-** awarded the rank of Eagle Scout in the Boy Scouts of America.

**U.S. President's Volunteer Service Award and the Post Star Teen Excellence Award**

## Technical Skills and Experience

**Programming Languages:** Java, Python, Swift, C, AWK, Go, HTML, Javascript, CSS, SQL

**Libraries/Frameworks:** Django, AngularJS, Node.js, TensorFlow, Spring

**Additional Tools:** Xcode, Git, MySQL, Heroku, UNIX, LaTeX, IntelliJ, MATLAB,