Colton Bishop

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Education

Princeton University   Princeton, NJ, USA | September 2016-December 2020
Pursuing B.S.E. in Computer Science (GPA 3.7) with a certificate in Statistics and Machine Learning

United World College of the Atlantic   St. Donats, Wales, UK | Graduated May 2016
Secondary School | International Baccalaureate Diploma

Work Experience

Microsoft | Azure Container Networking Team   Seattle, WA, USA | May 2020 – July 2020
Software Engineer - Intern
- Enabled the delegated network controller (DNC) to bypass container networking services during the creation and destruction of container infrastructure, allowing multiple local DNC instances to run simultaneously.
- Built a CI/CD concurrent load testing pipeline integrated with Azure DevOps for continuous and scalable regression testing and performance analysis of the DNC API; applied load testing infrastructure to expose several DNC liabilities.

Andlinger Center for Energy and the Environment   Princeton NJ, USA | September 2019 – Present
Quantitative Research Assistant with the Behavioral Science for Policy Lab
- Designed and conducted data scraping initiatives (government transcripts, academic journals, new sources, targeted social media users/regions/campaigns) and developed a language modeling and sentiment analysis API to expose i) how semantic treatment of the environment in business, policy, and academia has evolved over time, ii) how different geographic and demographic population segments respond to selected political and environmental events.

Brown Brothers Harriman | Application Production Team   Boston MA, USA | June 2019- August 2019
Software Engineer - Intern
- Proposed and developed a 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 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.

Alquilando | Argentinian Real Estate Tech Startup   Buenos Aires, Argentina | June 2018- August 2018
Software Engineer – Intern (All work conducted in Spanish)
- Proposed and built a Django-stack web app to automate contract generation, reducing 25-minute process 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.

Environmental Protection Agency (EPA)   Washington D.C., USA | January 2018 – February 2018
iOS Mobile Developer | "Princeternship" Program
- 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.

Selected Independent Projects (To view full portfolio, please visit bishopcolton.com/projects)

Wengga: platform for the crowd-sourced active learning of resource-scarce language data and generation of live translators
- Developed attention-based sequence-to-sequence neural network optimized for low-resource machine translation.
- Built web platform for active learning of new translation data according to a perplexity-based learning algorithm.
- Invited by Dr. Steven Bird to partner with his indigenous language research lab in Australia's N.T. to launch platform.

Donatello: integrated new parameters into Pixel2Mesh, a TensorFlow application to transform 2D images into 3D models.
- Added symmetry and topology-awareness so network can leverage user descriptions of symmetry and shape.
- Built frontend Django web application and GUI for interactive user input and refinement of mesh-modeled images.

Service | Arete Effective Altruism Fellow

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
Charity and Fundraising A Cappella Performances with the Princeton Tigertones	September 2016 – Present

Honors and Awards

Recipient of President Barack Obama's Volunteer Service Award, Post Star Teen Excellence Award, and Eagle Scout Award.
Spoke on behalf of education reform at the United Kingdom Parliament after founding the Ashoka Changemaker Competition.
Recipient of the Semester at Sea Davis Scholar Award, a full scholarship to participate in the Fall 2018 voyage.
Recipient of the United World College U.S. National Committee Award and grant to study for 2 years at UWC Atlantic College.

Technical Skills and Experience

Java, Python, Go, Swift, C/C++, AWK, HTML, JavaScript, CSS, SQL, Git, MATLAB, LaTeX, Azure DevOps, Adobe Creative Suite