Simon **Warchol**

5 Lawrence St. #1, Cambridge, MA 02139

314-856-8575 | simonwarchol@g.harvard.edu | simonwarchol.github.io | simonwarchol | simon-warchol-40966465

Education

Harvard John A. Paulson School Of Engineering And Applied Sciences — *Cambridge, MA*

PhD in Computer Science, Advisor: Prof. Hanspeter Pfister — *Sep. 2021 - Current*

- Topic: Visualization and Visual Analytics for Biomedical Imaging Data

Harvard John A. Paulson School Of Engineering And Applied Sciences — *Cambridge, MA*

Master of Engineering in Computational Science & Engineering, Advisor: Prof. Hanspeter Pfister — *Sep. 2019 - May 2021*

- Advisor: Prof. Hanspeter Pfister
- 4.0 / 4.0 GPA

Tufts University — *Medford, MA*

Bachelor of Science — *Sep. 2011 - May 2015*

- Magna Cum Laude
- Major: Computer Science; Minor: Economics

Experience

Takeda Research — *Cambridge, MA*

Software Engineer

- Working on visualization and visual analytics for the Cell Therapies team.
- Developing Angular frontend components and a FastAPI backend.

Bullhorn, Inc. — *Boston, MA*

Software Engineer — *Jul. 2018 - Aug. 2019*

- Developed "Sync," an Express NodeJS web application that integrates applicant tracking systems and vendor management systems.
- Created Angular dashboards to display critical information to customers using Chart.js and the Google Maps API.
- Created a work controller to handle high-volume API requests and predicatively scale servers using PM2.

DevOps Engineer — *Nov. 2017 - Jul. 2018*

- Implemented Netflix Spinnaker continuous delivery platform to deploy Bullhorn's Docker-based applications to Kubernetes clusters, drastically increasing scalability and streamlining the delivery pipeline.
- Created test and build tools in Jenkins using Apache Groovy and Python.

Technical Operations Engineer — *Nov. 2015 - Nov. 2017*

- Created a suite of customer engagement reports in Microsoft Reporting Services to help our Product and Customer Success teams understand how users interact with our application and identify at-risk clients.
- Developed Java Web Applications built on the Spring Framework for our Professional Services team, adding additional functionality to the Bullhorn ATS at the request of our largest customers.

Visual Analytics Laboratory at Tufts — *Medford, MA*

Research Assistant — *Sep. 2014 - Dec. 2014*

- Worked in conjunction with a team at the University of Michigan to analyze an extensive data set of infographics to determine which factors yield a more effective visualization.

Teaching

Harvard John A. Paulson School of Engineering and Applied Sciences — *Cambridge, MA*

Teaching Fellow for CS171: Visualization — *Sep. 2021 - Dec. 2021*

- Designed and weekly homework assignments in addition to office hours and grading.
- Awarded Harvard Q Award of Distinction and Excellence in Teaching

Harvard John A. Paulson School of Engineering and Applied Sciences — *Cambridge, MA*

Teaching Fellow for CS205: Computing Foundations for Computational Science — *Jan. 2021 - May 2021*

- Designed and taught weekly labs about parallel and cloud computing in addition to office hours, assignment creation, and grading.
- Awarded Harvard Q Award of Distinction and Excellence in Teaching

Harvard John A. Paulson School of Engineering and Applied Sciences — *Cambridge, MA*

Teaching Fellow for AC207: Systems Development for Computational Science — *Aug. 2020 - Dec. 2020*

- Taught weekly sessions regarding the development of scientific python packages in addition to office hours, assignment creation, and grading.
- Awarded Harvard Q Award of Distinction and Excellence in Teaching

Tufts University Department of Computer Science *Medford, MA*

Teaching Assistant for COMP15: Data Structures *Jan. 2014 - May 2015*

- Assisted Data Structures students in their understanding of course concepts, including sorting algorithms, hashing, trees, stacks, queues, and linked lists.
- Helped students plan out and debug course assignments and projects written primarily in C++.

Publications

Scope2Screen: Focus+Context Techniques for Pathology Tumor Assessment in Multivariate Image Data

J. Jessup, R. Krueger, S. Warchol, J. Hoffer, J. Muhlich, C. C. Ritch, G. Gaglia, S. Coy, Y. -A. Chen, J. -R. Lin, S. Santagata, P. K. Sorger, H. Pfister

IEEE Transactions on Visualization and Computer Graphics (2021) pp. 1–1. 2021

Honors & Awards

2021	**6-Year PhD Fellowship,** Harvard University	*Cambridge, MA*
2021	**Harvard University Certificate of Distinction in Teaching,** Q Award of Distinction and Excellence in Teaching for Role as Teaching Fellow for CS171: Visualization	*Cambridge, MA*
2021	**Harvard University Certificate of Distinction in Teaching,** Q Award of Distinction and Excellence in Teaching for Role as Teaching Fellow for CS205: Computing Foundations for Computational Science	*Cambridge, MA*
2020	**Harvard University Certificate of Distinction in Teaching,** Q Award of Distinction and Excellence in Teaching for Role as Teaching Fellow for CS107: Systems Development for Computational Science	*Cambridge, MA*
2011-2015	**Tufts University Dean's List,** Fall 2011, Spring 2012, Spring 2013, Fall 2014, Spring 2015	*Medford, MA*

Leadership

Harvard University Graduate School of Arts and Sciences Student Council *Cambridge, MA*

Department Representative *Jan. 2020 - May 2021*

- Represented the Institute for Applied Computational Science and Computational Science & Engineering students on the Graduate Student council.

Baseball Analysis at Tufts *Medford, MA*

President & Treasurer *Jan. 2012 - May 2015*

- Performed extracurricular statistical baseball research and data analysis.
- Visualized the results of these analyses and present them to fellow Sabermetricians and MLB executives.
- Compete in the SABR Analytics Conference Case Competition as part of Tufts' Baseball Analysis team.