

David Gong

dxjg@jhu.edu
(217) 722-5937
dxjg.github.io

EDUCATION	<i>Bachelor of Science</i> in Computer Science at Johns Hopkins University Advisor: Dr. Michael Dinitz Graduation Date: December 2016 GPA: 3.88, Science GPA: 4.0
RESEARCH EXPERIENCE	<div><div><i>Lab Assistant</i></div><div>Sept 2015–Dec 2016</div><div>Integrated Imaging Center, Johns Hopkins University, Baltimore, MD Lab Director: Dr. Michael McCaffery, Ph.D.<ul style="list-style-type: none">• Prepared samples for electron microscopy on the FEI Tecnai 12.• Used a Python-based image processing suite (EMAN2) for 3D particle reconstruction.• Attempted reconstructions of proteins: DnaBC, β-galactosidase, and papillomavirus.</div></div> <div><div><i>Research Assistant</i></div><div>Jan–Aug 2015</div><div>Algorithms and Complexity Group, Johns Hopkins University, Baltimore, MD Advisor: Dr. Michael Dinitz, Ph.D.<ul style="list-style-type: none">• Explored research in computer science theory under an REU grant.• Studied expander graphs, geometric spanners, and spectral graph theory.• Analyzed the use of greedy algorithms for generating approximate distance oracles.</div></div>
MEDICALLY RELATED EXPERIENCE	<div><div><i>Medical Tutorial Program Participant</i></div><div>Spring 2016</div><div>Johns Hopkins Medical Institute, Center for Bariatric Surgery, Baltimore, MD Dr. Kimberley Steele, M.D., Ph.D.<ul style="list-style-type: none">• Assisted with a study on the effect of warm-up exercises on surgeons' performances.• Shadowed for 20 hours between observing clinical rounds and bariatric surgeries in the operating room.• Observed study on surgical patients' neural responses to different food types.</div></div>
WORK EXPERIENCE	<div><div><i>Software Development Intern</i></div><div>May–Dec 2017</div><div>National Compliance Office, Kaiser Permanente, Oakland, CA<ul style="list-style-type: none">• Used SAP BusinessObjects to Design and implement the the CaseTrack Dashboards, a tool for the chief and regional compliance officers for performance analysis.• Using SMSS, ASP.NET with C# and Telerik, and HTML/CSS, created a web application, the Pharmacy Drug Loss Report Tool, used for filing and managing cases related to drug loss, waste, and abuse.• Explored data science in Python for the internal, annual Data Science Forecasting Challenge.</div></div> <div><div><i>Course Assistant:</i></div><div>Department of Computer Science, Johns Hopkins University, Baltimore, MD 600.363/463: Algorithms I</div><div>Spring 2015</div><div><ul style="list-style-type: none">• Hosted office hours for 2 hours/week.• Assisted with teaching fundamentals of computer science algorithms and complexity analysis.• Graded and provided feedback on written assignments and exams.</div></div>

- 600.120: Intermediate Programming Fall 2014
- Hosted office hours for 2 hours/week.
 - Assisted with teaching basic principles of programming, C and C++, using the Unix shell, and creating makefiles and shell scripts.
 - Graded and provided feedback on coding projects and written assignments.

- IT Support* May 2014–Aug 2015
- Information Technology, Johns Hopkins University, Baltimore, MD
- Installed and maintained networks points across the Johns Hopkins University undergraduate campus.
 - Assisted with campus-wide technological support by maintaining and servicing the HP Service Manager ticketing system.

COMMUNITY SERVICE

- Elementary School Tutor* Fall 2016
- Johns Hopkins Tutorial Project, Baltimore, MD
Center for Social Concern, Johns Hopkins University, Baltimore, MD
- Tutored 1-on-1 with an elementary school student in the basic subjects for 4 hours/week.
 - Curated lesson plans using feedback from my organizer.
 - Submitted periodic progress reports for the tutee's guardian(s).

- Soup Kitchen Volunteer* Summer 2013, Winter 2014
- Daily Bread Soup Kitchen, Champaign, IL
- Prepared/served lunches for the underserved members of the local community.
 - Assisted with locating accessible resources for basic necessities.

SKILLS

Relevant Lab Courses:

General Biology Lab I, General Biology Lab II, General Physics Lab I, General Physics Lab II, General Chemistry I Lab, Introductory Chem. Laboratory II, Intro Organic Chem Lab

Programming Languages:

C/C++, HTML/JS/CSS, Python, R, Java, PHP/MySQL, C#, Swift, L^AT_EX

Frameworks & APIs:

Hadoop!, OpenGL, OpenMP, C Spread, ASP.NET

Software Tools & Techniques:

SAP BusinessObjects, SMSS, Telerik, Tableau, Ajax

Foreign Languages:

Proficient Chinese, Intermediate Spanish, Basic German