

Work Experience

- **Self-employed**—Contract work

May 2019 – Present

- Performed PostgreSQL, JavaScript, and C++ programming for customization of ERP software
- Performed Python and JavaScript programming for a Slack application
- Used the following technologies: Python, PostgreSQL, JavaScript, C++, git, Docker, Heroku

- **Checkmate Champ (<https://www.checkmatechamp.net>)**—Creator and Sole Developer

August 2018 – April 2019

- Checkmate Champ is a website that presents chess tactics puzzles and allows the user to solve them interactively.
- Used the following technologies:
 - Back-end:* Python, CherryPy, PostgreSQL
 - Front-end:* JavaScript, OCaml (with js_of_ocaml)
 - Tools:* git, pytestdeployed on Google Cloud Platform

- **Bakround**—Senior Developer

October 2016 – July 2018

- Implemented continuous integration for company codebase using Jenkins
- Supervised deployment of data science team's Python code in production
- Started port of existing Java codebase to Python
- Used the following technologies:
 - Back-end:* Python, Java, Django, Flask, MySQL, PostgreSQL, RabbitMQ, Redis, Elasticsearch, SendGrid, nginx
 - Front-end:* HTML, JavaScript, jQuery, CSS
 - Tools:* git, pytest
 - Deployment:* Amazon AWS (EC2, RDS, Elastic Beanstalk, ElastiCache), Docker, Docker Compose, Jenkins

- **Yorn, LLC**—Software Engineer

October 2012 – October 2015

- Led company's move of hosting from Heroku to Amazon Web Services
- Constructed graphical tools to enable user-friendly manipulation of database
- Wrote system to generate \LaTeX -formatted report from user comments
- Implemented shim to connect newly developed user interface to legacy database
- Designed and implemented API to allow automated creation of new client records
- Used the following technologies:
 - Back-end:* Python, Django, PostgreSQL, JSON, IronMQ, memcached, Mailgun, Twilio
 - Front-end:* HTML, JavaScript, jQuery, \LaTeX , CSS
 - Tools:* git, VirtualBox (for testing front-end in IE)
 - Deployment:* Heroku, Fabric, Amazon AWS (EC2, S3, RDS)
- Attended AWS training event ("*AWSome Day*") at Pennsylvania Convention Center (Philadelphia, PA) on April 7, 2015

Education

- **Drexel University**—Philadelphia, Pennsylvania, U.S.A.
Ph.D. in Computer Science, September 2012
 - Defended thesis in June 2012, titled
“Problems in Extremal and Combinatorial Geometry,” advised by Ali Shokoufandeh
 - Final GPA: 3.99
 - Research assistant, September 2008 – March 2012
 - Teaching assistant, September 2007 – March 2012
- **La Salle University**—Philadelphia, Pennsylvania, U.S.A.
Bachelor of Science in Mathematics and Computer Science, 2006
 - Final GPA: 3.99 overall, 4.00 in both majors
 - General University Honors