

Vincent Song

<http://vwsong.com>
vincentwsong@gmail.com | 443.824.3228

EDUCATION

UNIVERSITY OF MARYLAND
BS, COMPUTER SCIENCE
May 2019 | College Park, MD

LINKS

Github: [vwsong](#)
LinkedIn: [vwsong](#)
Website: [vwsong.com](#)

COURSEWORK

MATH240: Linear Algebra
CMSC351: Algorithms
CMSC216: Systems Engineering
CMSC330: Functional Programming
CMSC250: Discrete Math
CMSC131: Intro to OOP
(Teaching Asst)

SKILLS

PROGRAMMING LANGUAGES

Java • HTML/CSS • JavaScript • SQL
OCaml • Python • \LaTeX

FRAMEWORKS/TOOLS

Node.js • ASP.NET • Bootstrap • Flask •
jQuery • Agile Methodologies

OTHER

Photography • Event Management

ACTIVITIES

BITCAMP

EXECUTIVE DIRECTOR

Coordinated over 60 student organizers and several teams: logistics, technology, sponsorship, marketing, and others to run the University of Maryland's flagship hackathon.

UNIVERSITY OF MARYLAND

TEACHING ASSISTANT

Piloted new flipped classroom model for CMSC 131: Intro to Object Oriented Programming I, under Professor Bill Pugh.

EXPERIENCE

NORDSTROM | SOFTWARE ENGINEERING INTERN

June 2017 – Aug 2017 | Seattle, WA

- Designed an algorithm to use "subscription" data to generate optimal sales, with demographic targeting capabilities.
- Owned and built an internal tool to monitor core API health for on-call engineers during Anniversary Sale.
- Migrated and transformed over 26k rows of Fee Codes data from legacy MS SQL on-premise database to a new schema on AWS Aurora as a part of an enormous modernization effort.
- Used in-memory storage (Elasticache/Redis) to dramatically decrease Fee Codes API latencies for internal downstream consumers.

PRAXIS ENGINEERING | IOT RESEARCH INTERN

December 2016 – January 2017 | Annapolis Junction, MD

- Took a week-long training session on basic cybersecurity skills, concluding with us performing a live buffer overflow attack.
- Spent two weeks working with a team of interns to analyze two common wifi webcams and document recorded vulnerabilities.

SPARKPOST (MESSAGE SYSTEMS) | SOFTWARE ENGINEERING INTERN

May 2016 – Aug 2016 | Columbia, MD

- Refactored the SparkPost PHP client library as part of their client library refactoring initiative.
- Fixed bugs, created new features, and performed code reviews on the SparkPost cloud web user interface.
- Created program which uploaded metrics (daily revenue, free/paid accounts, etc) to Keen.io dashboard for company-wide analytics.

AVESIS INC | SOFTWARE ENGINEERING INTERN

May 2015 – January 2016 | Owings Mills, MD

- Created exit surveys for employees leaving the company using ASP.NET/C/MS SQL effort.
- Developed 10+ web pages (landing page, FAQs, internal portal, etc) using HTML/CSS/JS as a part of site-wide redesign effort.

PROJECTS

SMART SALES | NORDSTROM INTERNAL HACKATHON

June 2017 | Seattle, WA

Built an algorithm that used subscription data to generate sales that would be able to target any demographic while maintaining minimal revenue loss.

LANGUAGE DETECT

May 2017 | College Park, MD

Started an introductory project to familiarize with core NLP concepts. I used n-gram profiling to analyze samples of training corpuses to build language profiles.

SCENTRY | VTHACKS

May 2017 | Blacksburg, VA

Created a web platform that allows a user to control a fleet of air fresheners on a smartphone or PC over the internet.