# AVA DELACRUZ

avadelac@usc.edu • 860-471-3331 • avadelacruz.com

### **EDUCATION**

#### University of Southern California • GPA: 3.84

Expected Graduation Date: May 2022

- B.S. Computer Science, minor in Spanish
- Honors: Grace Hopper Scholar, Rewriting the Code Fellow, National Merit Scholar, Presidential Scholar, Resident Honors Program
- · Awards: First Place Athena Hacks Programming Competition, Second Place PwC Cybersecurity Capture-the-Flag Hackathon
- Coursework: Software Development, Algorithms, Data Structures, Discrete Math, Linear Algebra, Differential Equations, Calculus

#### Conard High School • GPA: 4.00

August 2015 - May 2018

- Graduated in three years with Maximum Honors
- · National Honorable Mention National Center for Women in Information Technology (NCWIT) Aspirations in Computing Award

### **TOOLS AND TECHNOLOGIES**

C++, Java, Python, HTML, CSS, Javascript, ¡Query, Node.js, RESTful APIs, AWS Lambda, DynamoDB, SES, and API Gateway

### **WORK EXPERIENCE**

# AFE Software Development Engineer Intern • Amazon

May-August 2019

- Created a full-stack web application that facilitates meeting scheduling for data providers and the AmazonAPI governance body
- · Streamlined the code revision approval process for all Amazon Software Engineers whose code directly affects Amazon.com
- Reduced time taken to schedule meetings by 80% on average by automating user authentication, user authorization, time slot selection, time slot reservation, calendar event creation, and attendee invitation via email notifications

# Director of Service • USC Women in Computing

April 2019 - present

- Develop a comprehensive introductory computer science curriculum highlighting input, output, arithmetic, conditionals, and loops
- Lead coding events and teach over 100 K-12 students from historically underserved communities in the surrounding LA area

## Information Technology Intern • West Hartford Public Schools

June-July 2018

- Managed technology upgrades at 14 Connecticut schools by overseeing device inventory, configuration, and network administration
- · Registered, set up, and troubleshot over 1000 different devices, improving access to technology for over 5000 students districtwide

### TECHNICAL PROJECTS

# AAPI Meeting Scheduler • HTML, CSS, JS, Node.js, Ajax, AWS Lambda, DynamoDB, SES, REST APIs May-August 2019

- Authenticate potential users using internal Amazon APIs by checking whether or not their ticket has been reviewed by a bar-raiser
- Create, query, and update a DynamoDB governance body meeting availability database using Ajax, AWS Lambda, and API Gateway
- Design and implement an intuitive, dynamic user interface, including:
  - a landing page with a form that performs data validation using Javascript and Regular Expressions
  - a main page, which includes:
    - · an interactive meeting-date-selection calendar which automatically disables non-available dates
    - · time slot selection buttons which are dynamically enabled or disabled based on DynamoDB data
  - a final page which displays a customized confirmation message
- · Generate calendar invites for selected meeting times and invite attendees automatically using Node.js, Nodemailer, and AWS SES

# Shop 'Til You Drop • C++

April-May 2019

- · Simulates popular online shopping websites by allowing users to search for, rate, view ratings of, add to cart, and buy items
- · Wrote a hash function to securely store and later retrieve user credentials in an unordered map in order to authenticate users

### Password Cracker • Python

April 2019

• Self-taught Python and developed a brute-force password solver capable of cracking MD5 hashed passwords

Scrambled Game • Java May-June 2018

Designed and implemented a text-based word game with multiple difficulty levels in which the player has a limited amount of
chances to correctly guess a randomly-selected word that has been scrambled using a variety of shuffle algorithms