## **Daniel Kim**

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#### **EDUCATION**

Yale University, New Haven, CT

Aug 2020 – Present

Bachelor of Science in Computer Science and Mathematics

Unweighted GPA: 3.93/4.00

Relevant Coursework: Big Data Systems: Trends & Challenges, Data Structures and Programming Techniques, Systems Programming, Artificial Intelligence, Computational Vision, Probability Theory, Vector Calculus and Linear Algebra Awards and Honors: USA Computing Olympiad Gold Division, American Computer Science League – 1st in New Jersey & 2nd in 2020 Finals, 4-time AIME Qualifier (highest score of 10) via top 2.5%/5% score on AMC 10/12

#### TECHNICAL SKILLS

Languages JavaScript – React (Redux), Node.js (Express), C++, C, Python – Matplotlib, NumPy, HTML/CSS

Technologies NoSQL databases (DynamoDB, MongoDB), Amazon Web Services, Git, LaTeX

## **EXPERIENCE**

GoSite, Software Engineer Intern, San Diego, CA

Jun 2021 – Aug 2021

- Designed and implemented a web-based recurring invoice feature, allowing customers to schedule a set of invoices to send at regular intervals, as part of full stack development team
- Leveraged React with Redux to integrate user-facing web forms which consume a REST API to support user customization and create, update, and delete operations on invoices
- Developed and secured API endpoints on a serverless architecture in Node.js (with AWS Lambda) and MongoDB to send scheduled email invoice reminders to clients
- Utilized customer data platform Twilio Segment to increase product analytics coverage of all-in-one cloud-based software suite by 15% to formulate behavioral cohorts and gain insights into drop-off rates and conversion funnels
- Incorporated agile scrum methodologies with retrospective, grooming, sprint planning sessions and daily stand-ups

## Yale Entrepreneurial Society, Full Stack Developer, New Haven, CT

Nov 2020 - Aug 2021

- Engineered a scalable web platform (<a href="https://www.internships.yesatyale.org/">https://www.internships.yesatyale.org/</a>) to manage 1,000+ applications for 200+ job listings, successfully providing career opportunities to 250+ students
- Directed frontend development and modular design of application management system using React and Redux to help a team of 15+ recruiters conduct application reviewal
- Modeled and developed REST APIs with AWS Lambda, API Gateway, and DynamoDB to handle robust information management systems in the cloud for 140+ startups
- Managed automated production deployment systems using services Amazon CloudFront and CodePipeline

## Rutgers Discovery Informatics Institute, Research Intern, Piscataway, NJ

Sept 2019 - May 2020

- Utilized Python library Execo to design an API to automate distribution and deployment of operating systems and software on networked CPUs, decreasing installation time by 30%
- Implemented algorithms using metrics such as network latency and throughput to help identify compute nodes within certain clusters that are optimal for experimental usage, decreasing execution run time of simulations by 23%
- Employed Matplotlib and Apache Flink to conduct batch and stream processing on 12GB worth of taxi trip reports and extract key insights into New York City traffic flows

#### **PROJECTS**

# Multiplayer Playing Card Game (<a href="https://chinesehearts.herokuapp.com">https://chinesehearts.herokuapp.com</a>)

Jun 2021

- Deployed an online four-player variant of the card game Hearts on cloud platform Heroku
- Devised client-server architecture with a React/Redux frontend and a backend supported by Node.js and Socket.IO
- Applied object-oriented design and a finite state machine pattern to handle complexity of game logic

# Resource Management Web App (<a href="https://bcamathteam.org">https://bcamathteam.org</a>)

Apr 2020

• Developed website with 40,000+ pageviews to host lecture notes, preparatory resources, and dynamic blog posts and announcement updates with Firebase as backend to support admin authentication and CRUD operations

## Math Contest Official Website (https://holbrook.bergen.org)

Jun 2019

• Took initiative to build from scratch and maintain a new website with improved SEO and UX design to promote a statewide math contest with 450+ annual participants, resulting in monthly visits increasing by 70%

# **Advanced Precalculus** (ISBN-13: 978-0578479439)

Published Mar 2019

• Authored and published a 350-page proof-based math textbook and integrated into high school's math curriculum