

# Daniel Yu-cua

Software Engineer/Data Analyst

New Market, Maryland (Open to Remote and Relocation) | (808) 396-6570 | daniel.yucua@gmail.com  
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## TECHNICAL SKILLS

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**Front End** | JavaScript (ES5 and ES6), React, Next.js, HTML5, CSS3

**Back End** | Node.js, MongoDB, MySQL, Firebase, RESTful API Development

**Testing/Deployment** | Jest, Mocha, Chai, AWS: EC2

**Developer Tools** | Git, npm, Webpack, Babel, Agile Methodology

**Analytical Tools** | Pandas, Python, R, Tableau, Sickit-learn, Matplotlib

## EDUCATION

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**University of Maryland, College Park** – BS, Computer Science

2017 - August 2021

**University of Maryland, Global Campus** – MS, Data Analytics

2021 - December 2023

## SOFTWARE ENGINEERING APPLICATIONS & WORK HISTORY

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**Full-Stack Software Engineer** | www.218studio.com

January 2020 - 2022

*Modern implementation of e-commerce microservice along with stylistic server-side rendering of visualizers*  
Express | FireBase | EC2

JavaScript | Node.js |

- Optimized existing monolithic back-end of an e-commerce website to handle 360,000 requests per minute with low latency (<20 ms) and error rate (<0.1%) by horizontally scaling microservice to 5 AWS EC2 instances and using a least connections load balancing method with NGINX to increase fault tolerance
- Leveraged K6 and Loader.io to identify performance bottlenecks, then implemented caching to lower frequency of database retrieval to allow for a throughput increase of 733%
- Reduced query times to database from 6,000 ms to 12 ms by using aggregator functions and indexing foreign keys

**Frontend Software Engineer & Social Media Manager** | www.pukalanivillas.com

February 2020 - 2022

*Remote learning management system web application*

JavaScript | Next.js | EC2 | Node.js | React

- Construction of a modern promotional website for a multimillion-dollar housing project
- Developed front-end skeleton using modular, reusable React components and made final calls for production-level UI changes
- Directed and managed the social media services associated with the housing project to direct traffic into the website
- Implemented efficiently encoded images and text compression to improve page load time, achieving Google Lighthouse performance score of 96

**Data Analytics** | www.danielyu-cua.com/analytics

August 2021 - 2022

*Multipage website displaying various applications of Data Analytics*

JavaScript | React | Matplotlib | Pandas | EC2 | Python

- Architected a front-end display of live monitoring of the sentiment of any keyword using a globally streamed twitter feed.
- Visual odometry
- Hyper parameters
- Correlative analysis on the production and consumption of non-renewable resources in conjunction with global temperature anomalies.

**Instructor** | iDTech

May 2020 - 2022

*Lead Instructor for children aged 5-17*

Java | Python | Photoshop | Adobe Animate | Adobe Premier

- Guided new students through programming from basic variables to creating their own applications in Java.
- Taught students from knowing nothing to being able to utilize computer vision and machine learning in their own projects using google colab and teachable machine.
- Utilized the adobe suite to educate youth in animating, directing, and editing, their own short, animated featurettes.

## CERTIFICATIONS AND AWARDS

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**AWS Certified Cloud Practitioner** | AWS certification EXAM SCHEDULED

June, 4 2022

**Google Analytics Career Certificate** | Coursera

June 2022

**Eagle Scout** | Boy Scouts of America

September 2015