VINCENT NIKOLAYEV

(646) 265-0870 linkedin.com/in/vincent-nikolayev vincent.nikolayev@gmail.com

WORK EXPERIENCE

Software Engineer – *Tapinator Inc.* Mar 2021 – Present

- Principal software engineer; built and deployed consumer facing apps, internal tools, and app features
- Lead the development of *NFT500*, the first iOS app to enable casting digital art to AirPlay enabled devices such as Smart TVs; worked on all aspects of development including writing the client-side in React Native with native Swift components, a serverless backend API on AWS, and an HLS server architecture for low latency 24/7 media streaming
- Managed a developer intern, set feature deadlines, conducted code reviews and successfully deployed *NFT500 1.0* to production on the iOS AppStore within the anticipated timeframe
- Built and deployed boutique Web3 minting sites with ERC721 smart contract integration on behalf of successful NFT artists within rigid time and safety constraints that secured $1.5 million in additional gross earnings
- Designed and implemented the Bingo scratch-off ticket algorithm for *Lucky Lotto* which increased post-install retention by 2%
- Built and deployed web-based internal dashboards to collect analytics from different products for benchmarking and analysis, and to manage real-time work scheduling and payroll for game hosts in *Blackjack Live*

Generative Artist – *VES3L Art LLC.* Dec 2021 – Nov 2023

- Bootstrapped a code-based solo-artist studio and turned it into a successful business with more than $80,000 in gross revenue
- Developed fully procedural generative art using TypeScript, WebGL, and SVG with a conceptual emphasis on algorithmic and recursive logic
- Sold out four browser-based long-form collections with hundreds of editions each, two which were curated by premier generative art galleries including Art Blocks and Verse
- The VES3L collection portfolio can be viewed here: ves3l.com

Graduate Teaching Assistant – *New York University* Feb 2019 – May 2021

- Hosted weekly live tutoring sessions on foundational topics of Computer Science, including Discrete Mathematics, Programming with C++, Algorithms & Data Structures, Operating Systems, and Computer Networking
- Created practice exams and led exam review sessions with over 100 concurrent students
- Graded exams and assignments and developed a Golang tool to automate running and testing student submitted code

EDUCATION

New York University – School of Engineering May 2021

Master of Science: Computer Science – GPA: 3.9

Coursework: Compiler Design, Computer Graphics, Big Data, Machine Learning, Analysis of Algorithms, Operating Systems, Computer Networking, Information Visualization, Discrete Mathematics

CUNY Baruch College May 2018

Bachelor of Arts: English, Business Communication; Minor: Statistics – GPA: 3.8

TECHNICAL SKILLS

Languages: TypeScript, JavaScript, Python, C#, Java, C++, Rust , SQL, Swift, HTML / CSS, Golang , Solidity
Tools & Frameworks: Git, AWS, Docker, React, React Native, Pandas, Matplotlib, Unity, WebGL, OpenGL, Three.js, SVG, HLS

PROJECTS

Big Data Column Metadata Profile github.com/vinceniko/nyc-opendata-profiling

- Utilized Spark and Hadoop on high-performance parallel computing clusters to derive metadata from 1800+ datasets from NYC's Open Data Repository
- Implemented frequent pattern mining and similarity aggregation algorithms to identify semantic types
- Created a benchmarking tool to measure runtime performance such as execution time

Dual Contouring for Isosurface Extraction github.com/vinceniko/isosurface

- Implemented Dual Contouring on a Uniform Grid using compute shaders in the Unity game engine
- Visualized the algorithm's processes and presented a report to a Computational Geometry course with 50+ students

Personal Project Portfolio vinceniko.github.io