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Johnny (Nghia) Nguyen

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TECHNICAL SKILLS

Programming Languages: Python, Dart, Java, HTML, CSS, JavaScript, C++, C#, Kotlin, MATLAB, R
Tools and Frameworks: Git, VSCode, Figma, Flutter, JQuery, Android Mobile Development, Android Studio, REST API, Unity, Linux, Slack, Discord, Webflow, LaTeX
Machine Learning / Data: Firebase, Tensorflow, PyTorch, pandas, NumPy, Matplotlib, scikit-learn, Pymatgen, Tableau, Airtable, Microsoft Excel

PROFESSIONAL EXPERIENCE

Software Engineer, Technical Content (Intern to Freelancer) **May 2022 - Present**
Twilio **San Francisco, CA**

Developing technical content for Twilio's Developer Voices blog to educate aspiring Twilio developers

- Improving developer relations by encouraging developers to build through Twilio's blog and products by creating educational technical content
- Built 7 applications using Twilio APIs and products, and wrote 7 corresponding technical tutorials
- Boosted Twilio Blog's web traffic with thousands of page views by writing technical articles
- Collaborated with dozens of developers to publish 15 new pieces by reviewing drafts and software applications

Academic Tutor **Aug 2020 - May 2022**
University of South Carolina **Columbia, SC**

Tutored at the Dodie Anderson Academic Enrichment Center

- Helped over a dozen students reach their full academic potential by tutoring in Computer Science, Math, and Physics
- Addressed the specific needs of students by adapting individualized approaches and supplementary materials to communicate complex subjects

Machine Learning Assistant Researcher **May 2021 - Dec 2021**
University of South Carolina **Columbia, SC**

Researched at UofSC's Machine Learning and Evolution Laboratory

- Provided solutions in materials discovery by predicting molecular vibrational frequencies using a graph neural network
- Trained, tested, and evaluated over 40,000 crystal samples using Python packages, such as NumPy, pandas, scikit-learn, PyTorch, and Pymatgen
- Contributed to a first-author American Chemical Society research publication by improving machine learning models and creating graphic figures after using Python to manipulate and analyze data results

PROJECTS

Pohnpeian Language App

- Designed and prototyped an app using Figma
- Building an app using Flutter and Firebase, successfully creating a working proof of concept that allows users to learn Pohnpeian through lesson plans, quizzes, and external resources
- Creating testing suites for beta release using Flutter's documentation on unit, widget, and integration testing

Predicting Lattice Vibrational Frequencies Using Deep Graph Neural Networks

- Improved and adapted a graph neural network to predict vibrational frequencies in crystal lattice systems, and contributed to a corresponding first-author publication in the American Chemical Society's Omega journal

Git Time Travel Game

- Designed and programmed a game using Unity, featuring an in-game terminal that allows users to use Git commands to save and traverse timelines
- Wrote a corresponding tutorial, complete with diagrams and explanations, so users can follow along and learn Git commands, such as commit, branch, and checkout

EDUCATION

Bachelor of Science in Computer Science **Columbia, SC**
University of South Carolina, Honors College
Major: Computer Science - Minor: Mathematics - Summa Cum Laude