Kevin P Chen

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EDUCATION

New York University Tandon School of Engineering — Brooklyn, New York
Bachelor of Science in Computer Science (Minor in Mathematics and Game Engineering) — Class of 2027

- **Major GPA:** 4.00/4.00 | **Cumulative GPA:** 3.92/4.00 | **Activities and Honors:** Dean's List, Completed 2024 LeetCode Bootcamp

EXPERIENCE

A.I. for Scientific Research at NYU — Brooklyn, New York
Machine Learning Engineer — January 2024 - September 2024

- Spearheaded a project that improved morpheme segmentation using Llama 2 and GPT-2 models, resulting in a 60% improvement in accuracy and perplexity prediction.
- Designed and deployed a scalable, distributed system for processing large linguistic datasets using Python, improving real-time data processing speed by 30%.
- Collaborated with linguists to develop NLP models, achieving a significant reduction in model training time by parallelizing processes across multiple GPUs.
- Refactored legacy code to enhance maintainability, cutting down code complexity by 40% and improving system performance.

Trip.com Group — Shanghai, China
Backend Software Engineer Intern — July 2024 - September 2024

- Contributed to the development of an internal grammar and style-checking tool, increasing communication efficiency for 1,000+ staff members by 35%.
- Enhanced backend performance by optimizing Python-based algorithms, reducing memory usage by 15%, and increasing processing speed by 20%.
- Automated testing and debugging using PyTest and Jenkins, resulting in a 25% reduction in bug identification and resolution time.
- Integrated MongoDB with the internal tool, allowing faster access to real-time data queries and reducing query time by 20%.

Canadian Solar — Dallas, Texas
IT Engineer Intern — May 2024 - July 2024

- Collaborated on the design and deployment of a Manufacturing Execution System (MES) for 50+ factory machines, improving production efficiency by 30% and reducing downtime by 20%.
- Developed Python-based machine learning algorithms for real-time defect detection in solar panels, increasing accuracy by 40% and reducing production waste by 15%.
- Created real-time monitoring dashboards using Grafana, enhancing visibility into machine performance and allowing for proactive maintenance.

Thermo Fisher Scientific — Shanghai, China
Backend Software Engineer Intern — June 2023 - August 2023

- Automated SQL code generation using a Python script, reducing manual coding time by 25% and improving overall development efficiency by standardizing code across teams.
- Built custom RESTful APIs for internal tools, reducing API latency by 15% through optimized request handling.
- Assisted in developing CI/CD pipelines using Jenkins, improving deployment frequency and reducing time-to-market for key updates.

PROJECTS

AlphaDoMi — Shanghai, China
Inventor and Creator — September 2019 - Present

- Developed AlphaDoMi, a DSP-based device capable of detecting a player's intonation and rhythm with 99% accuracy by filtering string frequencies using noise-reduction algorithms.
- Distributed 20 AlphaDoMi models to a local autistic children's organization, resulting in a 60% improvement in rhythm and intonation for the Shanghai Autistic Youth Orchestra.
- Enhanced the system's user interface to support touch screen interactions, improving usability and accessibility for neurodiverse users.
- Published research paper that documented AlphaDoMi which was accepted by the 4th International Conference on Computing and Data Science.(CONF-CDS 2022)(Paper ID: CDS_0645)

IntroBot (Developed under NYU Tandon's engineering course) — Brooklyn, New York
Head of Production and Developer — September 2023 - December 2023

- Created IntroBot, a conversational robot designed to assist individuals with social anxiety, leveraging the ChatGPT API to simulate realistic social interactions with emotion-displaying capabilities.
- Developed server-side logic using C++ and Python, implementing a client-server architecture capable of handling multiple concurrent requests, improving system performance by 20%.
- Conducted user research and beta testing with 50+ participants, gathering feedback to improve system accuracy and user experience.

HONORS

Platinum Division in USA Coding Olympiad (USACO) — Online
Platinum Division — February 2021 - Present

- Advanced to Platinum Division with a perfect score of 1000/1000, demonstrating proficiency in algorithms and competitive programming.

SKILLS

- **Programming Languages:** Python, TypeScript, Node.js, Go, C++, Rust, Java, SQL.
- **Technologies:** RESTful Services, Client-Server Architecture, Distributed Systems, AWS, Docker, Kubernetes, Linux.
- **Frameworks:** React.js, Vue.js, Electron, Node.js, Express.js.
- **Tools:** Git, Jenkins, Docker, Kubernetes, PyTest, Matplotlib, Grafana.
- **Databases:** PostgreSQL, MySQL, MongoDB.