|  |  |  |  |
| --- | --- | --- | --- |
| **KAIJI FU** | kaiji@unc.edu  (252) 267-0412  Github/Linkedin: kaijif | | |
| **EDUCATION** | | | |
| **University of North Carolina at Chapel Hill** – Chapel Hill, NC | | Expected Jun 2026 | |
| *Computer Science, B.S.*   * **Coursework:** Discrete Mathematics, Data Structures and Analysis, Linear Algebra, Systems Programming, Foundations of Programming * **GPA:** 4.00 | | | |
| **Honors and Awards** | | | |
| * Carolina Scholar (full scholarship) * Honors Carolina | | | |
| **EXPERIENCE** | | | |
| **Nolyn** – Greenville, NC  [*nolyn.co*](nolyn.co) | | | May 2023 - present |
| *Founder* | | | |
| * Founded a startup w/ team of 5 to build a smarter stop-arm camera for 100X less than competitors ($30 vs. $3,000) * Built an IoT camera on the ESP32 platform with C++and a web interface with JS/React * Architected AWS cloud infrastructure with NoSQL DB, RESTful APIs, and an MQTT to communicate with cameras. * Coordinating closely with stakeholders and working on deploying on Pitt County Schools' 200+ buses * Received a $1,000 grant from Amazon | | | |
| **ACADEMIC RESEARCH** | | | |
| ***Machine Learning-Enhanced Electrocardiograms*** | | | Sep 2024 - present |
| *Researcher* | | | |
| * Working with Dr. Faisal Syed at UNC School of Medicine on using deep neural networks to analyze ECGs. | | | |
| ***Implementing a Federated Learning System to Protect Patient Privacy*** | | | Feb 2020 - April 2023 |
| *Lead Author* | | | |
| * Conducted research into applying federated machine learning in the field of healthcare data analysis. * Used TensorFlow-Federated to train federated models and Pandas/NumPy to perform data processing. * Demonstrated that federated modeling results in a <5% loss in accuracy while eliminating the need to share data * Presented my findings at East Carolina University's ISS Symposium.   ­ | | | |
| **LEADERSHIP AND COMMUNITY INVOLVEMENT** | | | |
| **Pitt Pirates Robotics** – Greenville, NC | | | Aug 2020 – Jun 2020 |
| *Software/R&D* | | | |
| * Trained a custom deep neural network with PyTorch to achieve real-time object detection. * Deployed model on the NVIDIA Jetson platform, a Linux-based CUDA-enabled edge processor * Designed website with Figma and built it out with Tailwind/Vercel | | | |
| ***The Daily Reflector*** – Greenville, NC | | | Dec 2022 - present | |
| *Columnist* | | | |
| * Regularly featured voice on issues ranging from technology to economic policy. | | | |
| ***Mozilla*** – San Francisco, CA | | | Dec. 2023 - present |
| *Open-Source Contributor* | | | |
| * Contributor to bugbug, a Mozilla project aimed at using ML to classify bugs | | | |
| **ADDITIONAL INFORMATION** | | | |
| * Highly proficient in Python, JavaScript, and Java. * Proficient in Rust and C/C++. * Experienced in building cloud applications, full stack development, and machine learning, particularly computer vision | | | |