Anthony Chen

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Education

University of California, San Diego   La Jolla, CA

- **Major:** B.S. Computer Science, GPA 3.9   06/2024
- **Awards:** Regents Scholarship, Provost's Honor
- **Coursework**: Data Structures & Algorithms,Computer Architecture, Machine Learning, OS, Networks

Experience

Horizon Med Innovation   Laguna Hills, CA
Software & Algorithms Intern   06/2023 – 09/2023

- Introduced filtering techniques to achieve 63% noise reduction from ECG signals
- Designed algorithm to identify R-wave peaks in arrhythmia ECG readings with 94% accuracy
- Accelerated Bluetooth client app performance by 9% through runtime optimizations
- <u>Leveraged Knowledge</u> in C#, .Net, Visual Studio, Android Studio, Java, Gradle, MATLAB, Digital Signal Processing, Bluetooth Low Energy Protocol

Southern California Edison   Pomona, CA
Data Analyst Intern   06/2022 – 09/2022

- Applied ML & NLP techniques to filter large datasets for relevant work orders
- Refined pipeline to identify key notification entries using TF-IDF for K-means classification
- Developed a cost budgeting program with 80% accuracy by training statistical models for time-series analysis
- <u>Leveraged Knowledge</u> in Python, SAS, PyTorch, TensorFlow, Natural Language Processing, Machine Learning, Big Data, ARIMA/SARIMAX/Holt-Winters forecasting

Delta Micro Tech   Lake Forest, CA
Software Intern   06/2019 – 08/2019

- Hand-picked over 2000 data points in training and testing datasets for facial recognition
- Consulted senior engineers to produce facial recognition software, reaching 83% accuracy
- <u>Leveraged Knowledge</u> in Neural Networks, Deep Learning, Feature Extraction, C++, Python

Projects

Expense Tracker

- Directed group of 10 in web-app development by leading meetings, assigning roles, and partitioning tasks
- Automated linting, unit testing, and deployment, decreasing refactor/debug related pull requests by 33%
- Established testing standard, reducing bug-related meeting minutes by 40%
- <u>Utilized:</u> JavaScript, HTML/CSS, indexedDB, ESLint, Jest, Codacy, Figma, CI/CD, GitHub, Agile, Scrum

Airplane DCGAN

- Designed and trained Generative Adversarial Network to produce realistic airplane images
- Fine-tuned network's discriminator, resulting in a 81% accurate aircraft classifier
- <u>Utilized:</u> Pytorch, Deep Learning, DCGANs, FGVC-Aircraft, Python

Hamming Parity

- Created RISC-like instruction set architecture while reducing instruction width to 9 bits
- Designed single-cycle, load-store processor hardware for ISA
- Customized assembler to convert assembly into machine code, streamlining software development
- <u>Utilized:</u> SystemVerilog, Modelsim, Quartus, FPGA design, Python

Skills

Software: (*proficient*): C++, Python, Java, Git, Unix (*familiar):* MySQL, JavaScript, CSS/HTML, Nodejs, React