Po-An Chen

(Software Engineer/ Data Engineer)

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EDUCATION:

- **University of Washington**, Seattle (Sep 2021 – Jun 2023)
  Degree: Master Major: Statistic – Advanced Methods and Data Analysis Overall GPA : 3.71/ 4.0
  Relevant coursework: Machine Learning, Data Visualization, Advanced Statistical Modeling and Big Data Analytics
- **National Taipei University**, New Taipei City (Sep 2015 – Jun 2019)
  Degree: Bachelor Major: Statistic Overall GPA: 3.00/ 4.0

TECHNICAL SKILLS:

- **Language & Framework:** JavaScript (TypeScript), Python, Java, R, C/C++, Node.js, React.js, Django, TensorFlow, D3.js
- **Tools & Platforms:** Linux (Ubuntu, CentOS), Tableau, Web Data Scraping, Explorational Data Analysis, LaTeX, AWS, Azure
- **Libraries & Technologies:** Docker, MS SQL, Postgres SQL, DynamoDB, AstrixDB, Dask, GSL, MPI

WORK EXPERIENCE:

Instantnano Biosensor, Taipei City (Nov 2023 – Now)
Full Stack Software Engineer

- Engineered scalable software systems, reducing operation time by 30% through automated calibration workflows.
- Designed interactive web-based software tailored for clinical researchers, which reduced manual reporting time by over 50%.
- Delivered technical support services, resolving 10 equipment issues from daily users to maintain uninterrupted operations.

Jersey STEM, New York (Jul 2023 – Sep 2023)
Individual Contributor / Scrum Master Intern

- Spearheaded the development of custom scripts, seamlessly integrating multiple APIs to enhance workflow efficiency.
- Successfully led and coached a team as a Scrum Master, overseeing the management of more than 20 tickets on a weekly basis.
- Contributed to the creation of over five comprehensive reports, providing critical data-driven guidance for decision-making.

Big Data Center in National Taipei University, New Taipei City (Oct 2020 – Sep 2021)
Research Assistant / Administrative Assistant

- Conceptualized and designed a robust ETL pipeline to efficiently manage and process an 800GB dataset of research data.
- Skillfully managed and tracked budgets for research initiatives, ensuring financial accountability and resource optimization.
- Demonstrated exceptional leadership by guiding a team of over 10 undergraduate student researchers within the organization.

PROJECT EXPERIENCE:

NGS Workstation – An Automatically Machine for NGS Sequencing (Nov 2023 – Now)
Software Contributor, Instantnano Biosensors

- Collaborated closely with a cross-functional biology team to develop a fully automated NGS sequencing platform.
- Acted as the main point of contact with OEM clients, translating user requirements into customized frontend designs.
- Designed backend infrastructure from scratch using modern frameworks, maintaining both frontend and backend components.

Cellphone Signal Positional Data Processing and Analyzing (Nov 2020 – Sep 2021)
Project Manager, Big Data Center in New Taipei City

- Utilizing geospatial techniques to estimate population flow, thereby informing strategic decisions regarding the optimal placement of 5G cell sites, social housing, and the allocation of critical resources such as firefighters and the police office.
- Leading the development of a real-time standard for analyzing human behavior, replacing the registration-based approach.
- Acting as a bridge between five esteemed professors within the Center and government officials from various departments.

A Corrected Approach to Post-prediction Inference for Longitudinal Data (Feb 2023 – Mar 2023)
Project contributor, University of Washington

- A post-prediction inference correction procedure (called “postpi”) was recently proposed by Wang et al., which is generalizable to any machine learning method and leverages a simple relationship model between observed and predicted outcomes.
- Proposing a modified procedure and show that it can provide robust inference for clustered data with predicted outcomes.