✉ nathanielbd@gmail.com

Nathaniel Budijono
Computational scientist

{ https://github.com/nathanielbd
📖 https://linkedin.com/in/nathanielbd
📎 https://nathanielbd.github.io

Objective

Seeking machine learning, computational biology/ chemistry internships and research opportunities

Education

University of Minnesota-Twin Cities

Bachelor of Science, Computer Science and Mathematics
Expected May 2022

Achievements

- ❖ Honors student, 3.75+ GPA
- ❖ Computer science Scholarship (1 of 4 awardees)
- ❖ Best ML, AI, Social Good hack: Hacktech 2020
- ❖ Winner, Wells Fargo Campus Analytics Challenge

Coursework

- ❖ Data mining, machine learning, deep learning
- ❖ Computational genomics, systems biology, biochemistry, genetics
- ❖ Quantum mechanics, computational chemistry, quantum computing
- ❖ Cryptography, error-correcting codes

Skills

Languages
Python, Java, C, R, Scala, SQL, Bash

App Frameworks
Flask, React, React Native, SocketIO, Firebase

Data
Pandas, Numpy, PyTorch, Databricks, Sklearn

DevOps
Git, Docker, Linux, Google Cloud Platform, Datadog, Jenkins

Other
LaTeX, vim, Gaussian 16, CHARMM, Manim

Work Experience

Smart Information Flow Technologies

AI Research Intern   May-Aug 2021

Rally Health

Software Engineer Intern   May-Aug 2019

- ❖ Created a utility for next-generation data pipeline to gauge data throughput, monitor job duration, and track which rows failed which data validation. Scala, Datadog API, Databricks
- ❖ Created a comprehensive and responsive web dashboard with pipeline health and performance metrics for production and next-generation data pipeline. Airflow, Flask, SQLAlchemy, nvd3.js
- ❖ Created an ETL job to process ledger data from incentives program and performed end-to-end testing. Spark, SQL, Redshift JDBC

University of Minnesota - CSBIO Lab

Undergraduate Researcher   May 2020-

- ❖ Created a pipeline for visualizing genetic interaction networks and investigated machine learning methods to predict gene function from a genetic interaction network. Sklearn, PyTorch

Community

University of Minnesota-Twin Cities
Society of Asian Scientists and Engineers

Lab Director   Jan 2020-

- ❖ Lead development of a web app for navigating the confusing maze of tunnels on campus.
- ❖ Create machine learning, control systems, and scientific programming workshops to facilitate extracurricular learning.

App Developers Club

Curriculum Director   Dec 2019-

- ❖ Develop workshops to teach building an application from using React Native, React, SocketIO and Flask

I am an American citizen