# Max Boonjindasup

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in max-boonjindasup

**№** Max\_Portfolio

MaxBoonjindasup

## **Education**

09/2014 – 06/2018 La Jolla, US Bachelor of Science, University of California San Diego

Cognitive Science (Machine Learning & Neural Computation) | Biochemistry

# Relevant Experience

11/2021 – 11/2022 Beverly Hills, USA Manager, Beverly Hills Arthritis Associates

- Automated data cleaning and analysis of accounting ledger using Excel and Python scripts to identify unpaid accounts, recovering \$100,000 in profit.
- Reviewed claims, referrals, medication usage, and office visits to model trends in treatment costs, providing monthly revenue estimates and insights into improving patient churn reduction.
- Led a team **to analyze claims, document data in Epic EHR**, and manage +120 medlegal cases.

03/2021 – 10/2021 Los Angeles, USA

Research Associate II, Smidt Heart Institute, Cedars-Sinai Medical Center

- Implemented 3 Excel templates to automate data collection and analysis, improving efficiency and accuracy by an estimated 20%.
- Leveraged statistical modeling to analyze complex datasets for gene expression and protein concentration determination.
- Researched the interplay between extracellular vesicles, macrophages, and T-cells in muscle regeneration.

07/2019 – 01/2021 Thousand Oaks, USA

#### Associate Scientist, Amgen

- Prototyped an **end-to-end system that seamlessly automates Amgen's workflow** to accelerate precise data capture, rigorous analysis, and comprehensive reporting for diverse projects, **culminating in a company-wide presentation and project lead.**
- Oversaw the development of 9 drugs from discovery to FDA approval and eventual market release.

#### Consulting

08/2023 - 10/2023

# **Skin Cancer Detector**

- Built a skin lesion model (*CNN* 95% recall and F1 score) using Python, OpenCV, & Tensorflow that **classifies** 7 **cancer types** based on clinical images of skin cancer patients.
- Identified trends and outliers in healthcare data by leveraging the CNN model to **enhance** accurate patient outcome projections and revenue estimations.
- Deployed the model on a website to accept photos and help identify malignant lesions.

07/2023 - 08/2023

#### Predicting Employee Retention

- Created an **employee attrition model** (*XGBoost 98% accuracy and precision*) using *Python* that identified 5 key factors for improving employee tenure, **leading to a projected 20%** increase in resource management and employee satisfaction.
- Conducted statistical analysis of employee departure and identified a significant correlation between the assignment of > 4 projects and a 200% increase in employee turnover.
- Cleaned, processed, and analyzed a 5-year employee dataset to predict employee retainment and visualize insights through *Pandas, Seaborn, & Tableau*.

04/2023 - 05/2023

#### Heart Disease Predictor

- Developed an **ensemble of machine learning models** (kNN, NN, XGBoost, DT, SVM) in Python to **classify heart disease** using cross-validation and GridSearchCV for optimization, resulting in a **neural network with nearly 100% accuracy**.
- Performed exploratory data analysis on ~900 patient samples through *NumPy*, *Panda*, & *Matplotlib* to identify patterns, handle missing/categorical data, and standardize variables.

## Certificates

Google Advanced Data Analytics
 IBM Data Science
 Data Science in Healthcare

# **Skills**

Languages: Python, SQL, R, Excel, Git, Matlab

Tools: BigQuery, Tableau, Power BI, OpenCV, Docker

Modeling: Regression, Classification, Neural Networks,
Random Forest, PCA

Statistics: Hypothesis Testing, A/B Testing, Multivariate
Analysis

## **Publications**

Individual Alpha Frequency Determines the Impact of Bottom-Up Drive on Visual Processing ☑ Stephanie Nelli, Aayushi Malpani, Max Boonjindasup, John T Serences, Individual Alpha Frequency Determines the Impact of Bottom-Up Drive on Visual Processing, Cerebral Cortex Communications, Volume 2, Issue 2, 2021, tgab032, https://doi.org/10.1093/texcom/tgab032

Alpha entrainment of posterior visual cortex impacts visual detection 🛭

Stephanie Nelli, **Max Boonjindasup**, Aayushi Malpani, John Serences; Alpha entrainment of posterior visual cortex impacts visual detection. Journal of Vision 2017;17(10):976.