Shlomo Dahan

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EDUCATION

University of Pennsylvania **Jan 2023 - Dec 2024 (Expected)**
Master of Computer & Information Technology, GPA: 3.83/4.00 *Philadelphia, PA*
Relevant Courses: Discrete Mathematics, Computer Systems Programming, Data Structures & Algorithms, Algorithms & Computation, Networked Systems, Computer & Network Security

University of Miami **Aug 2015 - Dec 2018**
Bachelor of Business Administration in Finance, GPA: 3.60/4.00 *Coral Gables, FL*

WORK EXPERIENCE

J.P. Morgan Chase & Co. **Jun 2018 - Jul 2021**
Private Banking Analyst *Miami, FL*
- Optimized UHNW client portfolio management with advanced data analysis, employing Monte Carlo simulations for risk assessment and predictive analytics to forecast returns, as part of a team that contributed to a $500MM growth in AUM.
- Automated morning and cash flow transaction reporting using custom Python scripts; synthesized datasets on end-to-end client account activities such as bank transfers and trades to create holistic reports on spending, income, and investments.
- Reduced manual entry errors and cut team report generation time by 30% by automating complex tasks using Python.
- Exceeded financial targets by 15% through Agile-driven collaboration with risk management and client advisory teams, streamlining project delivery via Outlook and daily meetings focused on market updates and business pipeline reviews.

Como **Jun 2016 - Aug 2016**
Business Analyst *Tel Aviv, Israel*
- Researched/analyzed POS market trends, creating a robust leads database in Salesforce for targeted business expansion.
- Enhanced CRM functionality by refining data structures and information processing in collaboration with sales and marketing teams, boosting new client acquisition rates.

PROJECTS

Advanced Network Programming, CIS 553 *(C++, NS3)* **Sep 2023 - Dec 2023**
- Engineered link state and distance vector routing protocols using C++ and NS3, optimizing network throughput and reliability in distributed system simulations with Dijkstra's and Bellman-Ford algorithms.
- Created a peer-to-peer search engine using a custom Chord Distributed Hash Table, applying cryptographic hashing for fast and secure data indexing and retrieval.
- Integrated dynamic node management with proper stabilization and data reshuffling, and reduced search time complexity from O(N) to O(log N) utilizing Chord finger tables.

VeriCreds, Hackathon *(React, Next.js, Redux, Tailwind CSS, Axios, Flask, PyMongo, Postman)* **Apr 2023 - Aug 2023**
- Contributed to the full-stack development of a Web3 Proof of Concept for a cloud-based document-sharing solution, creating an intuitive MVP to demonstrate decentralized file management and blockchain integration.
- Developed the front-end interface and authentication features, including modal functionalities for document management; integrated backend services using MongoDB and Axios for API request handling, and leveraged Postman for debugging.
- Engineered the blockchain-based document-sharing platform using IPFS for document upload and sharing, with secure access control managed through Metamask authentication and Moralis for backend services.

COVID Pattern Analysis *(PyTorch, scikit-image, pandas, Google Colab, ResNet18)* **Nov 2022 - Dec 2022**
- Developed a machine learning model to predict COVID-19 infections based on X-ray images with over 96% accuracy, utilizing transfer learning with ResNet18 to fine-tune the final layer of the neural network.
- Designed a custom dataset class for data loading and preprocessing, implemented ResNet18 for deep learning, and used normalization and binary cross-entropy loss to handle imbalanced data and train the model accurately.
- Optimized GPU usage and managed memory limits on Google Colab via batch processing, and enhanced model generalization with data augmentation techniques like normalization.

SKILLS

Languages: Python, Java, C, C++, JavaScript, HTML/CSS
Frameworks/Libraries: React.js, Next.js, Flask, PyMongo, TensorFlow, PyTorch, scikit-image, pandas
Tools/Technologies: Git, MongoDB, NS3, Google Colab, Postman