Jake Brooks

(856) 489 – 9615 l jakebroo@wharton.upenn.edu

https://github.com/jakeb103 | linkedin.com/in/jake-brooks-48568a203 | https://jake-brooks.com

EDUCATION

University of Pennsylvania, Jerome Fisher Program in Management and Technology	Philadelphia, PA
• School of Engineering and Applied Science: BSE in Computer Science, Minor in Mathemat	tics May 2024
• The Wharton School: BS in Economics, Concentration in Finance	May 2024
• Major GPA: 4.00/4.00 Cumulative GPA: 3.96 /4.00	
• Member of <u>Eta Kappa Nu</u> Honors Society (Computer Engineering/Science Honors)	
Relevant Coursework: Big Data Analytics; Corporate Finance; Global Valuations, Accounting, Engin	eering Probability
Future Courses (Before Summer 2023): Machine Learning, Financial Derivatives, Corporate Valuation	n
Cherry Hill High School East	Cherry Hill, NJ
Awards: <u>National Merit Scholar</u> 2020; <u>Valedictorian</u> 2020; <u>Intel ISEF Finalist</u> 2017; <u>VEX W</u> PROFESSIONAL EXPERIENCE	orlds 2017, 2018
777 Partners, Incoming Summer Analyst and Data ScientistJu	un 2022 – Aug 2022
• Will prepare financial models for potential investments and perform general market research	
• Will analyze investments with statistical models and offer enhancements to portfolio compani	ies
Infosys Instep, Machine Learning Engineering InternN	May 2021 – Jul 2021
• Developed a Machine Learning API for document clustering, showing twice the accuracy of preliminary tests with the RVL-CDIP database (clustering across 16 groups)	previous models on
• Used unsupervised training through masked visual language modeling for the LayoutLM mod	lel in Python to
improve bounds using pyTorch and TenserFlow methods and models and pandas dataframes	5
Stedman Labs, Researcher A	ug 2018 – Oct 2019
• Designed and conducted a research project that analyzed the evolutionary implications of the	gene MYH16
• Developed a novel gene mutation detection technique, comparing proteins to find frameshift i	nutations
PROJECTS	
Life Expectancy Predictor N	Nov 2021 – Dec 2021
• Worked on a team of 3 to create a machine learning model, predicting the average life expectancy of a country as above or below average with 98% accuracy	
• Used a random forest classifier and Naïve Bayes in Python to label countries based off of a se	t of 5 features
Smart Dog Feeder	Jul 2019 – Jul 2019
• Built a smart dog feeder with 4 others that could scan a dog's collar and provide a set food po	rtion using IOT
• Created a go to market strategy and business plan with the business model canvas	
Fall Detection ShoeA	ug 2016 – Aug 2017
• Worked with a partner to create a shoe that could detect if the wearer fell then contact authoric connection to send out a text with Twilio and an accelerometer and pressure sensor to detect the s	ties using a Wi-Fi he fall
• Was a finalist project at Intel ISEF 2017 Pitched the project to a VC and the C-Suite of Aetres	X
LEADERSHIP	
University of Pennsylvania, Data Structures and Algorithms TA	Aug 2021 – Present
• Hold office hours and a recitation to teach class material, and grade assignments every week	0
Penn Aerial Robotics, Navigation Team Software Engineer	Sep 2021 – Present
• Develop software in Python on GitHub with a team of 5 for controlling UAVs to complete ch	allenges
• Created a specialized navigation method using an adjusted version of the A* algorithm	C
Weiss Tech House, WeissScale Consultant	Sep 2020 – Present
• Advise early-stage startups on raising capital and developing their products	
• Revised the pitch deck for WellTrip before they became Venture Lab Startup Challenge Final	ists
SKILLS AND INTERESTS	
Technical Skills: Java, OCaml, Python, SQL, Machine Learning, Bash, Microsoft Excel, NLP, FPGA, Verilog, Interests: Standup Comedy (Performing), Sailing, Scuba Diving (PADI Open Water), Skiing, Playing Soccer	Vivado