# Janus Bo Andersen

Available to work in Singapore on LOC (no quota). LTVP-Plus. Singaporean spouse. Available from end of January 2021.

Software and embedded developer with strong interest in computer vision, ML/AI, DSP, SoCs and web back-ends. Solid quantitative finance background.



#### **DFTAILS**

Residence

Living in Sg with Singaporean spouse.

Work on LOC via LTVP-Plus.

Pursuing PR.

Danish/EU citizen.

### CONTACT

Mobile +65 97243507

E-mail

janus@janusboandersen.dk

LinkedIn

linkedin.com/in/janusboandersen

Github

github.com/janusboandersen

### **LANGUAGES**

Danish native
English fluent
German advanced (B2/C1)
Mandarin basic

#### **PROFILE**

Looking for developer or engineer internship in the tech sector in Singapore with a company working on hard problems. I have a track record in finance, and I am pursuing my passion for tech and for building things by completing a degree in software and embedded engineering.

## SELECTED TECH PROJECTS

- Computer vision 3D reconstruction and image depth-segmentation.
- Hardware accel. ML on vision data with Xilinx SoC edge-processing.
- Quadrotor control system development.
- Lab equipment-as-a-service using MQTT-connected IoT, Dockerized micro-service backend Django/Postgres/Nginx, responsive frontend.
- Smart industrial energy metering with WM-Bus and Cloud.
- DSP algos for indicating heart arrhythmias and measuring HRV.
- Productivity software rolled out in-house to 2000+ employees.
- Quantitative multi-currency forex risk management and hedging system for multinational, industry-leading pharma company.
- Credit risk models for major Danish bank with extensive back-testing.

### **EDUCATION**

## **B.Eng. Electronic Engineering: Software and Embedded**

2018 – 2021 (exp.) | Aarhus University, Denmark

Top of the year with current GPA 11.9 (12-point scale).

- Core focus on software, cloud, embedded and distributed systems.
- Elective focus on ML, Computer Vision, linear algebra, SoC design.
- · Education committee member.

#### M.Sc. Finance

2009 | Aarhus University, Denmark

Top of the year with GPA 11.5 (12-point scale).

- Master's thesis: Commercialization of Microfinance, portfolio view.
- Focus on corporate finance, financial engineering, quantitative methods, statistics, econometrics.
- Selected for Doing Bus. in China case comp. with BCG, Novozymes.

#### **B.Sc. Economics and Business**

2007 | Aarhus University, Denmark Highest GPA of the year of 10.6 (old scale).

- Bachelor's thesis: Interest-rate term structure models.
- McKinsey Award and Scholarship: First prize for best B.Sc. result.

Exchange at Singapore Management University.

### SELECTED WORK EXPERIENCE

#### **Independent developer and consultant**

2016 - 2017 | Remote, international

- Developed a communications and productivity tool for an industry-leading pharma company. Still in use today.
- Visual identity design, user-tested UI/UX, system integration to backend infrastructure for fast data retrieval.

## Novo Nordisk Philippines | Head of Finance, Legal, Logistics & IT

2014 – 2016 | Manila, Philippines

- Drove turn-around in affiliate with new management team.
- Planned and ensured significant investments for three-year period, enabling launch of new pharmaceutical products, headcount increases and investments in the market.
- Responsible for finances and budgets, ensuring that ambitious growth targets for sales and profits were reached two years in a row, and maintaining affiliate funding and cash position.
- Built and led department of 10 employees, with focus on employee performance and development.
- Implemented significant step-up in professionalism by projects in accounting, planning, reporting and logistics processes, as well as training and anchoring business ethics.
- Instituted improvements in employee conditions and company image, among other by driving office relocation project and deployment of a car fleet for the sales force and management.

#### Novo Nordisk A/S | Financial Risk Manager

2011 – 2014 | Corporate Treasury, Denmark

- Drove capital structure management through recommendations to the executive management and board of directors, and subsequent implementation in the market via share buybacks, stock splits, etc.
- Drove currency hedging with OTC traded derivatives. Hedging multiple currencies using forwards, swaps and options. Responsible for strategy, planning and daily trading execution in response to changes in exposure.
- Project responsible to implement a quantitative currency hedging and risk mgmt. model with McKinsey and PwC.
- Recurring and ad hoc analyses of political and market developments, communication to senior management.
- Liaising with core banks for operations and tenders.
- Daily leadership of department graduate.

#### Novo Nordisk A/S | Global Finance Graduate

2009-2011 | Denmark, India, China

- The program is a 2-year international talent program with rotations in four areas of the global finance org.
- Project mgmt. within "internal management consulting". Finance Projects, Denmark.
- Controlling, reporting and distributor management. Beijing, China.
- Off-shoring of financial processes from HQ and affiliates, change management. Bangalore, India.
- Measurement and reporting of enterprise risks vs. budgetary and strategic goals. Novo Nordisk Risk Office,
   Corporate Financial Planning, Denmark.

## Jyske Bank A/S | Quant. Analyst

2007-2009 | Quantitative Research, Denmark

• Development, implementation and testing of credit risk models on bank's loan portfolio.

### **TECHNICAL SKILLS**

Software dev, languages, build, test systems:

C, C++11/14/17, Python 3, Matlab, Bash/sh, VBA • CMake 3.x • GoogleTest, Catch2 (C++) • Unittest, PyTest (Py)

Cloud, Linux, DevOps, Databases, Web and networking

AWS • Oracle Linux 7, CentOS 7, Ubuntu 18.04, 20.04 • Git, Github • Docker, Compose • PostgreSQL, MongoDB • Django, Flask (Py), Nginx, HTML5/CSS/Bootstrap 4 • MQTT, TCP/IP, Sockets

Analysis, Machine Learning, DSP, Computer Vision

Matlab: Filter Design, DSP, Image Proc., Computer Vision, Control System • Python: NumPy, SciPy, Pandas, Scikit-learn, Keras, Matplotlib, Seaborn • OpenCV • SAS: BASE, STAT, IML • SAP: FI/CO, BW

**Embedded** 

MCU, DSP: FreeRTOS • Freescale (Arm Cortex-M0+), Beagle (Cortex-A8) • TI C5535 DSP • CAN, I<sup>2</sup>C, SPI, UART • SoC, FPGA: VHDL, HLS/SDS • Xilinx Vivado, SDK, SDSoC, Vitis • Xilinx Zynq-7000 SoC, Artix-7 FPGA