JON-PAUL BOYD
Intelligent Systems Engineer

A multi-skilled SAP HANA technical architect & A.I. engineering postgrad who thrives on delivering tangible, cutting-edge solutions that inform, empower & perform. I help clients solve business challenges fast with strong theory, practical hands-on, clarity of thought and communication.

☐ +41 (0)79 952 18 81   ✉ jp@corticalstack.ai   ▭ corticalstack.ai   in jonpaulboyd   ◉ Nyon, CH

CAREER HIGHLIGHTS

SAP HANA Technical Architect
Nestle | Vevey, CH | 2014 – 2017
- Technical lead, inspiring team implementing groundbreaking first HANA-based analytic reporting solution for 3000 users.
- Led 5 HANA major upgrades & migration of analytics sidecar to embedded NetWeaver/HANA dual stack.
- Extensive XSC/XSA development with database modelling, Fiori, SQLScript, XSJS, Node.js, security, optimisation.
- Developed automated tool for analytic privileges build & assign, performance tool measuring query runtimes vs KPIs.
- Configured HANA workload management, HALM, HRF. Major contributor to Nestle HANA Development best practices.
- Daily liaison with Nestle & SAP partners, presentation to management, key users, technical and product teams.
- Learned I'm still hungry for technical challenges.

SAP HANA Technical Architect
Bluefin Solutions | London, UK | 2014
- Helped BAT realise Gartner's Logical Data Warehouse concept by implementing HANA SDA for data federation of London & Sydney databases.
- Developed P&L with sub-second performance (legacy 2m10s), SAP Fiori KPI dashboard with line item drill-down.
- Learned trust won on transparency & keeping delivery promises goes a long way.

SAP HANA Technical Architect
HANA Propulsion Laboratory | Blonay, CH | 2013
- Engineered remote piloted vehicle with real time telemetry to Cloud-hosted HANA database for analytics & real time vehicle control via openUI5 browser cockpit.
- Data mining for game analytics &achievement/reward system tied to mission objectives & pilot behaviour.
- Learned benefits of deep and wide research.

SAP Web Dynpro ABAP Consultant
Nestle| Vevey, CH | 2010 – 2013
- Lead developer for complex development & problem-solving, delivered technical training for offshore teams.
- Brought sophisticated recipe change doc concept to life with UI design driven by simplicity, familiarity & customisation.
- Learned greater self-belief & improved interpersonal skills through learning from others.

SAP ABAP Consultant
Belgian Railways| Brussels, BB | 2008 – 2010
- With a natural team-lead expertise successfully delivered a warehouse management shipment handling project.
- Individually responsible for complex bespoke development functionality within logistics execution.
- Learned love of OO dev & software in physical systems.

SAP ABAP Consultant
Cap Gemini| Middlesbrough, UK | 2000 – 2008
- Senior ABAP dev in SAP competency centre, responsible for on-going support, dev & upgrades for several clients.
- Analysed customer SAP systems from ABAP perspective to enable the smooth transitioning to *SAPrun* support.
- Delivered revenue earning on-site consultancy/training.
- Work pipeline management and assignment, training and support of 3 ABAP developer colleagues.
- Innovated systems integration monitoring dashboard.
- Learned rewards of coaching juniors.

EDUCATION

Masters Intelligent Systems
De Montfort University | UK | 2017 – 2020
- Discovered why stronger partnerships should exist between enterprise and academia.
- **Applied Computational Intelligence (88%)** Predicting customer behaviour with tree-based classifiers. Extensive Python with data profiling & preparation, unsupervised & supervised machine learning, overfitting protection, hyperparameter tuning, model scoring, evaluation & selection.
- **A.I. Programming (80%)** NLP with Python & NLTK context-free grammars for natural language to formal SQL database query.
- **Data Mining (80%)** Full-flow data mining analysis and machine learning to predict risk indicators for cardiovascular disease.
- **Neural Networks (80%)** Evaluation of biomass & classification of network activity (intrusion, attack or normal) with nn's.
- **Fuzzy Logic (94%)** Classification of breast cancer tumours with fuzzy inference system (outperforming neural networks & other ML approaches). Paper being submitted to journal of *Applied Soft Computing* for publication.
- **Research Methods (96%)** PhD proposal for augmented analytics.
- **Mobile Robots (97%)** Virtual search & rescue robot controlled via Python API, implementing obstacle avoidance, sensor data fusion, environment mapping, precision navigation and victim location.
- **Computational Intelligence Optimization (100%)** Design and build of Hyper-heuristic Optimization Platform, a Python-based framework to address the real-world problem of scheduling optimisation. 5 example nature-inspired metaheuristic algorithms are implemented. A hyper-heuristic feature dynamically switches between low-level metaheuristics to deterministically use the most appropriate algorithm according to current problem state, or select one stochastically.
- **Masters Project In Progress** Building cloud-hosted medical research cockpit for knowledge discovery, summarization, topic classification and clustering etc for best-informed next stage research actions, using COVID-19 literature as unstructured data sources.

PRAISE

STATS

24
Years software dev

13
Years SAP ABAP dev

5
Years HANA dev

8
Masters modules graded distinction

36
Companies provided expertise

12
Times consulting contract extended

1
Individual delivering client centric excellence

TOOLS

Python
Pandas
Numpy
Scikit-Learn
Keras
NLTK
Elasticsearch
MongoDB
SAP HANA
SAP Fiori
SAP ABAP
SAP Security
ReactJS
JavaScript
Amazon AWS
MS Azure
Docker
Git
GitLab
Jira
Linux
Windows 10
SAS