Daniel de Barros

Rotterdam, the Netherlands

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Skills

Programming Languages	Python, C, C++, C#, JavaScript, LaTeX, MATLAB, HTML, CSS, SQL
Developer Tools/Platforms	Azure DevOps, Jira, CI/CD Pipelines, Git, Linux, Docker, Postman
Engineering Tools	MATLAB & Simulink, Siemens COMOS, SmartPlant Instrumentation
Languages	English (Native), Dutch (Intermediate), Portuguese (Intermediate)

Experience

Instrumentation and Process Control Engineer | Bilfinger   Oct 2024 – Present
Schiedam, the Netherlands

- Lead I&C Engineer - Greenfield plastic waste to aromatics process plant
- Lead Software Engineer/Project Lead - COMOS Software Development for Bilfinger NL, leading the development effort and architecture of multidisciplinary design software

Software Engineer (R&D) | Zimmer Biomet   July 2023 – Oct 2024
Delft, the Netherlands

- Development, testing, maintenance and documentation (Python, JavaScript) on 2x Software as a Medical Device products, available worldwide, used in 5000 robot-assisted or manual surgeries thus far in 2024
- Implementing complex, high quality medical software systems that meet stringent industry standards and regulatory requirements (ISO 13485, ISO 14971, IEC 62304) resulting in full FDA and EU MDR compliance

Instrumentation and Process Control Engineer | KH Engineering   Mar 2022 – Jun 2023
Rotterdam, the Netherlands

- Full control system, software algorithm and hardware design, installation and commissioning of a ~ 1000 input/output distributed control and safety instrumented system
- Construction and stakeholder management (vendors, contractors, clients, project managers) in various settings (client facing meetings, factory and site acceptance, commissioning, construction site)
- Developed a tool (Python) for engineering leads and project managers that automated man-hour estimates for engineering projects in various phases based on key design parameters

Control and Automation Engineer | Hatch   Nov 2019 – Feb 2022
Johannesburg, South Africa

- Lead software developer – process engineering – leading developer and support teams with Agile principles
- Product lifecylce management, software development (C# and .NET), documentation, deployment and support of an object oriented, database design tool - used as an internal global standard and implemented successfully on 8 global projects
- Translating multidisciplinary engineering requirements (Process, Piping, Mechanical, Instrumentation and Electrical) into object oriented software and deliverables that significantly improved the efficiency, consistency and quality of the engineering design process at Hatch
- Mentoring and educating team members
- Conducting training sessions and supporting diverse global users, engineers and developers alike
- Stakeholder management and feedback (global discipline directors, engineering team leads, project managers) on software development cycle, plan progression and feature delivery estimates

Engineering Intern | Applied Coating Technologies   Nov 2018 - Jan 2019
Johannesburg, South Africa

- Cross platform application development (C#), automating site visit reporting and quotation
- Control system and sensor testing and commissioning at various process plants
- Advanced controller software training and application

CERTIFICATIONS

VCA-VOL: Safety for Operational Supervisors	Mar 2022
Professional Scrum Master (PSM I)	Oct 2024
PRINCE2®7: Practitioner	Oct 2024

EDUCATION

University of the Witwatersrand — Johannesburg, South Africa

Bachelor of Science in Electrical Engineering	Mar 2020
Bachelor Science in Biomedical Engineering	Mar 2018