# CRAIG FRAYNE

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#### **Profile**

- · Technical Communicator and Project Management Professional (PMP) with cleantech and software sector experience and a successful track record in start-up, corporate, public sector, and non-profit contexts
- Versatile and interdisciplinary academic background combining engineering, natural and social sciences; effective researcher and technical writer with peer-reviewed publications
- Teaching, instructional design, and course development experience in post-secondary, community service, corporate, and ESL settings
- Experience in research consulting in the environmental and energy sectors; software industry experience includes SaaS, EdTech, and machine learning
- Programming skills in Python (Pandas, NumPy, Scikit-learn) and Javascript (jQuery, D3.js); exposure to R, Java, and Matlab

## Experience

# **Technical Writing, Project Management & Web Development**

August 2014 – Present

Ontario, Canada

Palabra Technical (Freelance)

- Front end web design, JavaScript programming, graphic design, technical writing, ux writing, translation, digital media
- · Math & science interactivity, research, and visualization for clients in digital publishing and higher education
- · Project design and delivery for non-profits and SMEs

#### **Project Manager**

May 2018 - November 2020

DigitalEd

Waterloo, Canada

- Technical account management, training/onboarding users, and collaborating with instructors/authors to create digital learning content for higher-ed STEM
- Developing internal Python scripting tools to automate processes and tasks related to content authoring and quality control
- · Consulting on internal projects and strategic initiatives, including providing subject matter expertise on Open Source eLearning tools, integrating third- party JavaScript apps, and interaction design
- Implemented Atlassian JIRA for project management; oversaw the adoption of Kanban workflow based on Agile principles
- · Automated project reporting, budget tracking, and metrics using customized Google Scripts

#### **Engineering Editor & Data Analyst**

May 2016 - Apr 2018

Microsoft Research & Maluuba (acquired by Microsoft)

Montreal, Canada

- · Prepared and edited large data sets to be used for product development (Android application) as well as research projects (artificial intelligence)
- · Managed data collection through written instructions, quality control, and design of an online crowdsourcing platform using HTML/CSS/Javascript
- Tested product quality and logged errors using JIRA
- · Developed Python scripts and Jupyter Notebooks to enhance data quality, visualize data, and improve the workflow
- Managed contractors through budget tracking, project scheduling, and quality control guidelines

# Other Experience

#### **Non-Profit Sector**

Jan 2007 - Sep 2020

with various organizations

Canada, Germany, Latin America

- Supported in project development, communications and reporting for local and international projects (leading to PMP certification)
- Led translation and facilitation for project stakeholders in intercultural, multilingual environments
- Managed public relations and community outreach programs to raise awareness and advance public policies related to sustainable energy, food production, skills training, and local economic development
- Created print and digital content through writing, graphic design, video editing, WordPress development, SEO/SEM, and social media management

#### Education

### Technische Universität Bergakademie Freiberg

Saxony, Germany

PhD, Faculty of Economics

- focus: applied linguistics and intercultural communication
- dissertation: "Language games and nature: a corpus-based analysis of ecological discourse"
- · summa cum laude

#### **Bauhaus-Universität Weimar**

Thuringia, Germany

MSc, Envionmental Engineering & Management

• dissertation: "Systems analysis of power and water cogeneration"

#### **Queen's University**

Ontario, Canada

BA, Mathematics

• electives in humanities & languages

# Professional Development, Certifications & Memberships

**Certifications:** Ecology Conservation & Management (Ducks Unlimited), International Public Sector Accounting Standards (CIPFA), Project Management Professional (PMI)

**Professional Memberships:** Association for Computing Machinery (ACM), Canadian Industrial Heritage Centre (CIHC), International Communication Association (ICA), Project Management Institute (PMI)

**Professional Dev.:** Project Management (Coursera Specialization), Digital Manufacturing and Design (Coursera Specialization), Nanobiotechnology (Grad. Certificate, TU Kaiserslautern)

# Skills

Languages: Python, SQL, JavaScript, HTML/CSS, R, Matlab

Human Languages: native English speaker with experience working in French, German, and Spanish

language environments

Software Tools: Adobe Creative Suite, Autodesk Fusion

Developer Tools: Jupyter Notebooks, GitHub, Google Cloud Platform

Libraries: pandas, plotly, numpy, scikit-learn, scipi, d3.js