Carlos E. **Tejada**

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Employment

Netcompany A/S
Copenhagen, Denmark

IT CONSULTANT
June 2021 – Present

- Designed, developed and deployed a natural language processing and machine learning architecture to identify document types based on their content using Python.
- Designed, developed and deployed an architecture for managing, transforming, aggergating and stardardizing of billions of geo-spatial data points using Python, SQL and cloud technologies.
- Created a series of dashboards and visualization tools for quantitative and geo-spatial data using PowerBI and Apache Geoserver.
- Created a natural language processing pipeline to extract meaning from unstructured text, and transform it into a machine usable version.
- Implemented a machine learning pipeline for determining the best machine learning model algorithm and parameters, depending on the incoming data.
- Regularly interacted with clients and translated their business requirements into application features.

University of Copenhagen
Copenhagen, Denmark

PH.D. FELLOW
2018 – June 2021

- Investigated novel techniques for the construction of interactive objects using acoustic and pneumatic methods, and machine learning and mathematical models.
- Used acoustic, and barometric sensor data to develop custom machine learning pipelines to enable non-expert designers to 3D-print interactive objects without assembling electronic circuits.
- Collaborated with researchers from across the globe.
- Published work in top-tier conferences on Human-Computer Interaction.

Rochester Institute of Technology
Rochester, New York, USA

GRADUATE RESEARCH ASSISTANT
2014 – 2018

- Assisted in the development of novel, wearable systems for hands-free interaction.
- Developed an acoustic signal processing and machine learning pipeline using Python to correctly identify individual teeth clicks using a head-worn microphone.
- Implemented an application using Python and Javascript to use individual teeth clicks as hands-free interface controls for computing devices.

Tous Software Corp.
Miramar, Florida, USA

SENIOR SOFTWARE DEVELOPER
2012 – 2014

- Led a team developers in creating a new reporting portal for customers using Java, PHP, and Go.
- Interfaced between clients and developer team to effectively implement the requirements.

Education

University of Copenhagen
Copenhagen, Denmark

PH.D. IN COMPUTER SCIENCE, FOCUSED ON DIGITAL FABRICATION
2018 – October 2021

- Thesis title: *Print-and-Play Fabrication*.
- Designed, developed, and implemented a series of techniques for the construction of interactive artifacts without the need of assembly of circuits, or parts, or the calibration of machine learning models.
- Publications available upon request.

Rochester Institute of Technology
Rochester, New York, USA

M.SC. IN INFORMATION SCIENCE
2014 – 2016

- Special focus on machine learning and database management.
- Thesis title: *Knock-on-Wood*
- Explored the use of machine learning and acoustic signal processing to identify physical materials as part of a digital fabrication pipeline.

Pontificia Universidad Católica Madre y Maestra
Santiago, Dominican Republic

B.SC. IN SYSTEMS ENGINEERING
2008 – 2013

- Special focus on information retrieval and database management.
- Thesis title: *Solve-for-X*
- Developed a mobile and web application using optical character recognition and linear algebra that allows users to solve mathematical equations by taking a picture with their phones or computers.