Titus Ebbecke

SUMMARY

Interdisciplinary designer/artist/software developer. Built fully autonomous robots that paint non-human art, informed exhibition visitors about climate change, social inequality and artificial intelligence with new human-machine-interfaces. Research focus on machine learning, generative design, large-scale networks, hmi, robotics.

EDUCATION

Bachelor of Arts in Design (With Distinction)

University of Applied Sciences Wuerzburg-Schweinfurt, Faculty of Design · Wuerzburg, Bavaria · August 2019 · GPA 3.8/4.0

EXPERIENCE

Bachelor Student

KUKA Robotics

June 2019 - July 2019, Augsburg

Developed novel raster-image to CNC-paths algorithm. Supervised by head of corporate research Dr. Rainer Bischoff. Organized funds and a partnership with KUKA to create my bachelor thesis consisting of an KUKA industrial robot painting GAN generated artworks on canvas. Demonstrated full project in late September to KUKA R&D and marketing.

UI/UX Designer

Volkswagen AG

September 2017 - March 2018, Berlin

Developed and designed high-fidelity prototypes for a central app concept serving a fleet of over a million cars in Framer/CoffeeScript. Implemented chat bots and similar predictive assistants. Conceptualized and designed UX flows for a variety of projects. Created UI and corporate design guidelines.

Cryptocurrency Broker

Freelance

2017 - 2018, Berlin

Managed Portfolio of 5000€ from 4 investors. Increased value to ~9000€ (~80% increase) with a peak of ~12.000€. Invested & traded Bitcoin, Ethereum, Ripple, Litecoin.

UI/UX Designer

Just Intelligence (now mVISE/Opcyc)

February 2015 - April 2015, Hamburg

Conceptualized UI in Photoshop, integrated new UI with WinForms in .NET application for >14,000 users. Designed two 4x5x4m exhibition stands.

UI/UX Designer, Web Developer, Cinematographer

Freelance

January 2014 - now, Germany

Designed UI's and Frontends for a variety of desktop and mobile applications, developed/designed multiple websites for clients, directed/shot movies for advertisements/student films with team sizes ranging from 5 to 35 people.

SELECTED COURSEWORK

Bachelor Thesis ("Artistic Creativity as a Property of Human and Artificial Intelligence")

KUKA Robot Language, Python (OpenCV, NumPy), WorkVisual, Generative Adversarial Networks, Soldering

4x4x2m installation. An industrial robot painting AI generated artworks without human supervision. Robot painted for >10 hours over a two day exhibition.

Interactive Media (Topic: Artificial Intelligence)

Python, PS, GAN's, TensorFlow, PowerShell, Linux (Bash), Git

Trained GANs on creating novel non-human art. Setup & benchmarked GAN's and processing pipelines (VMs/Jupyter Notebooks). Dataset of 21,000 images, organized with PowerShell, optimized with self-developed face-detection based image-cropper (Python). Trained for >100 hours on VMs with 1 Tesla V100.

Interface Design (Topic: Climate Change)

Java, Photoshop, Motion Interpolation Systems

Created 4x2x3m interactive sculpture displaying change of north-polarice cap. Scraped NASA/NSIDC satellite data and interpolated it with accuracy. Constructed metaphor-based interface to bring scientific methods & findings closer to 50-100 exhibition visitors.

SKILLS

Robotics: KUKA Robot Language, Installation & Programming of KUKA R1420 w. KRC 4, Installation of near real-time communication with KRL-Ethernet, WorkVisual

Programming: Python (OpenCV & NumPy), Linux/Unix Shell, Git, JavaScript (DOM), Processing (Java), HTML/CSS, Twitter API, AWS & GCP, Rapid Prototyping w. Framer (CoffeeScript), TensorFlow (Beginner)

Design: Adobe CC (9+ years experience in: Photoshop, After Effects, InDesign, Premiere, Illustrator), Xd, Digital Illustration (Wacom)

3D: Cinema 4D, 3DS Max, Photorealistic Rendering w. Corona & Vray & Quixel Megascans/Bridge/Mixer, Unity

Cinematography: DaVinci Resolve, Premiere, AE, Worked intensively with Blackmagic Ursa 4K & BMCC & BMPC, Sony FS-Systems, Canon C-Series, Proficient in 4K RAW Workflow/Color Grading

Hardware: Soldering, Sewing & Tailoring, 3D Printing