

Guillaume de Cannart

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"If the physics allow it, I will get it done."

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1196A Sherwood Avenue • Santa Clara • California • 95126 • United States

Education: Intended Embedded/Firmware Engineering Major

Diablo Valley College

PLEASANT HILL, CALIFORNIA

Electrical Engineering & Computer Science (for transfer), 4.0 GPA

2017 - present

Honors/Activities: Viking Valley Engineering (MASCOT project), RoverTeam, Math Club, AMATYC Math Modeling (Finalist), Intramural Public Speaking (Finalist), Piano Series Masterclass Performer, Phyllis Howe & C.I.S.E. Scholar

University of California, Berkeley

BERKELEY, CALIFORNIA

Concurrent Enrollment - Foreign Law & Politics, 3.7 GPA

2018

- Independent research: The duality of internet censorship in modern Iran —
- CalHacks 5.0 (Fordimize)

Sint-Jan Berchmanscollege Brussels

BRUSSELS, BELGIUM

Math and Sciences High School diploma (secondary education)

2013 – 2016

Science, Mathematics & Roman languages

Experience & Developed Skills

NVIDIA Corp.

SANTA CLARA, CALIFORNIA

Performance Engineering Intern

Jun '19 – present

Software engineering & power performance testing of NVIDIA hardware to respond to critical prototyping needs and product details for engineering and marketing purposes.

- Improved automation software efficiency in Python and Perl. Suggested & executed script refactoring initiatives reducing automation turnaround time by 50%.
- Schematic analysis for hardware instrumentation (to retrieve power data)
- Benchmarking of NVIDIA hardware and creation of reports for hardware engineering & marketing teams
- CI/CD maintenance, side projects in setting up containers for internal webtool deployment

Viking Valley Engineering

DIABLO VALLEY COLLEGE, CALIFORNIA

Founder & Engineering Lead

Aug '18 – present

VVE is developing a robotic campus mascot (Project MASCOT) aiming to reduce time spent by students orienting on campus, and contributing to the campus community. We've successfully created two prototypes, and have involved 40+ students. (www.dvcrobotics.tech)

- Python webapp dev. - HTML, CSS, JS, & Python: control interface in Python using Flask & websockets
- Sensor & microprocessor integration to Raspberry Pi. (GPS, SPI, I2C, ADC, camera feed over sockets)
- Team leader & Interactive Systems Lead: Team management, administrative challenges
- Mechanical work - TIG welding, manual manufacturing with i.e. lathe & milling machine
- Secured funding by AUTODESK Inc. (outreach, communication)

Robotics & Engineering - RoverTeam

PLEASANT HILL, CALIFORNIA

Hardware Engineering team member

Jan '18 – May '18

Robotics & Engineering at Diablo Valley College developed a reduced-scale model of the 'Curiosity' Mars Rover. Parts and software were designed and manufactured in-house.

- 3D-Designed and manufactured CAD parts for a reduced-scale model
- Performed FEA on structural members
- Selected power supply, motors, and regulated voltages across onboard electronics

DVC Baja SAE Racing

PLEASANT HILL, CALIFORNIA

Founder & Project Leader

Aug '17 – May '18

Diablo Valley College Baja SAE Racing is an initiative comprising a team of students engineering an off-road vehicle to be presented at the 2019 Baja SAE Oregon intercollegiate competition. (Discontinued for liability reasons)

- Led and coordinated bi-weekly team meetings, ensuring team progress
- Mentored and guided sub-team research
- Managed administrative challenges
- CAD design of vehicle components

SunWork Renewable Energy Projects

BERKELEY, CALIFORNIA

Community Volunteer

Jan '18 – present

Small-scale rooftop solar panel installation non-profit work. Experience with i.e. electrical wiring, solar micro-inverter installation, & construction work.

Fundación Hermano Policarpo

BARRANQUILLA, COLOMBIA

Outreach Coordinator

Mar '17 – Jun '17

Fundación Hermano Policarpo is a non-profit organization supporting the education of disadvantaged young women in the city of Barranquilla, Colombia.

- Promoted and mentored in STEM subjects,
- Organized funding and social outreach for the NGO.
- English-Spanish interpretation

Other Work Experience

Spruce Restaurant

SAN FRANCISCO, CALIFORNIA

Food busser, Front house staff

Jul '17 – Dec '17

Food busser responsibilities at Michelin starred Spruce SF. An unforgettable experience.

Hillstone Restaurant

SAN FRANCISCO, CALIFORNIA

Waiter, Front house staff

Jun '18 – Dec '18

Waiter & customer care at Hillstone Embarcadero, San Francisco. Developed people skills and made nice tips.

Other Projects

Hackathon Projects

CruzHacks - Tech Innovation Winner

Jan '19

Won the 'Tech Innovation' award category during the 36-hour CruzHacks Hackathon with "the Glove", an interfacing device using multiple IMU sensors to control embedded devices such as robotic arms, and drones. (- C++, Arduino, C#, Kalman filter)

MakeHarvard 2.0 - Buzzworks

Feb '19

We created a robot that recognizes strawberry flowers and simulates buzz pollination by manipulating motors in all (XYZ) dimensions. It utilizes computer vision arguments on the mock strawberry flowers, with OpenCV and a python backend operating on Raspberry Pi 3 Model B. (- Python, Stepper motors, Raspberry Pi, OpenCV)

CalHacks 5 - Fordimizie

November '18

An on-board analytics tool for Ford onboard monitors using SDL. The interface allows for user manipulation of vehicle data, and change of vehicle settings for driving optimization. (- Swift, Ford SDL)

DIY Robotics

PLEASANT HILL, CALIFORNIA

Various Projects

2015- present

Developed maker skills:

- Built a tiny self-balancing robot (arduino nano)
- Home automation: Used ESP8266 for home lighting automation (RGB LEDS, outlet automation)
- 3D Printing - CAD design and 3D printing of many parts & home accessories.

Competencies & Interests

Robotics & Hardware • C++ • Python • Embedded Systems • Web Development • Automation • Project Management • Leadership • CAD • MATLAB • \LaTeX • Foreign Languages • Piano Bar - Piano, Violin, and Vocals • Windsurfing • Memes and Puns • Automotive Repair • Scientific Research • Nutrient Consumption

Natural languages

Besides being a STEM enthusiast, I also find a lot of joy in learning new languages and experiencing other cultures. So far, I speak five languages fluently, and I'm currently learning Farsi. Working in a multi-cultural environment or in a foreign culture is a huge plus to me.

- English (*mother tongue*)
- French (*mother tongue*)
- Dutch (*full professional fluency*)
- German (*full professional fluency*)
- Spanish (*full professional fluency*)
- Farsi (*beginner*)