

WOMEN
+ GIRLS
IN TECH



@cibr1974

THE EXHIBITION

ADA LOVELACE

1815 → 1852

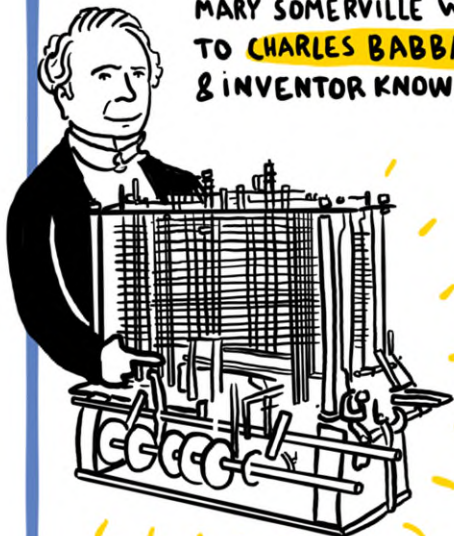
DAUGHTER
OF THE POET
LORD BYRON



You are
the princess
of
PARALLELOGRAMS

I am
the 1st
Coder
in the world

1832 MEETS PHYSICIAN & MATHEMATICIAN
MARY SOMERVILLE WHO INTRODUCES HER
TO **CHARLES BABBAGE**, A MATHEMATICIAN
& INVENTOR KNOWN AS "THE FATHER
OF COMPUTERS"



IT'S FOR
BABBAGE'S
ANALYTICAL
ENGINE
THAT ADA WROTE
THE FIRST
COMPUTER
PROGRAM
IN 1843



IN THE 1980'S,
THE UNITED STATES
DEPARTMENT
OF DEFENSE
GAVE THE NAME OF

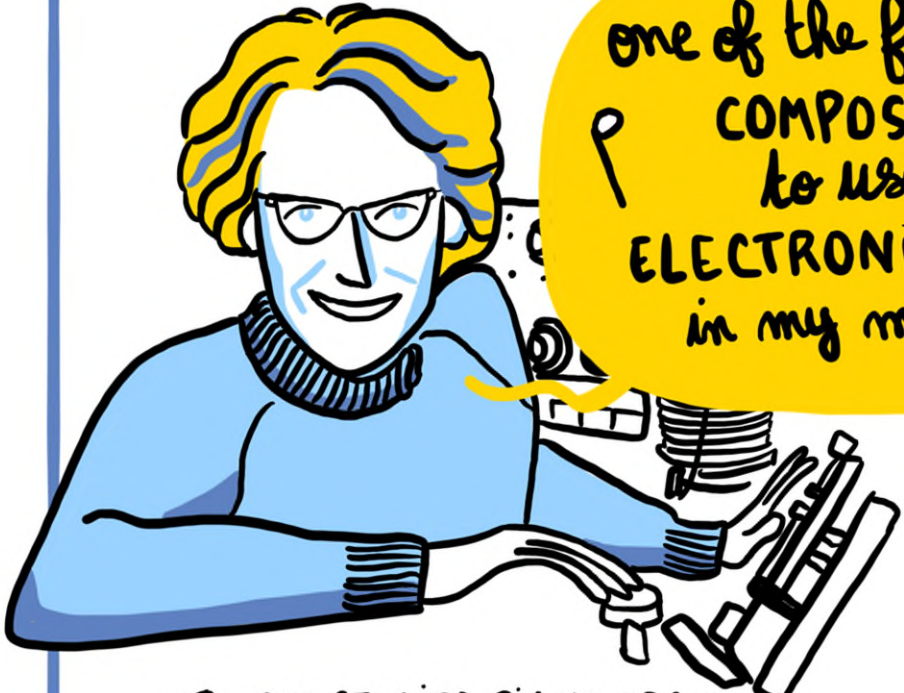
Ada 

TO A PROGRAMMING
LANGUAGE

IT'S STILL USED TODAY
FOR ADVANCED
TECHNOLOGIES: SPACE,
AERONAUTIC,
AUTOMOTIVE TECH

EACH YEAR
IN OCTOBER
THE ADA
LOVELACE DAY
CELEBRATES
THE ACHIEVEMENTS
OF WOMEN IN SCIENCE,
TECHNOLOGY,
ENGINEERING
& MATHS 

DAPHNE ORAM 1925 → 2003



I was one of the first composers to use electronic sounds in my music

HER WORK MADE **SYNTHETIC SOUNDS** CREATION WAY EASIER AND PAVED THE WAY FOR FUTURE COMPOSERS AROUND THE GLOBE

A TECHNIQUE THAT PRODUCES SOUNDS BY DRAWING ON A GLASS STRIP

SHE DESIGNED **ORAMICS**



SHE STUDIED PIANO, ORGAN AND COMPOSITION IN A SCHOOL FOR GIRLS

SHE REFUSED PURSUING STUDIES AT THE PRESTIGIOUS ROYAL COLLEGE OF MUSIC TO WORK FOR **BBC**



WITH HER COLLEAGUE DESMOND BRISCOE SHE CREATES THE BBC RADIOPHONIC WORKSHOP, THE SOUND EFFECTS UNIT OF THE RADIO STATION

from 2025 on
every craft sent
to space is to come
across a debris
according to NASA

AT 8, SHE GROWS FOND OF SPACE
WHEN SHE DISCOVERS HER FATHER'S
ASTRONOMY ENCYCLOPEDIA



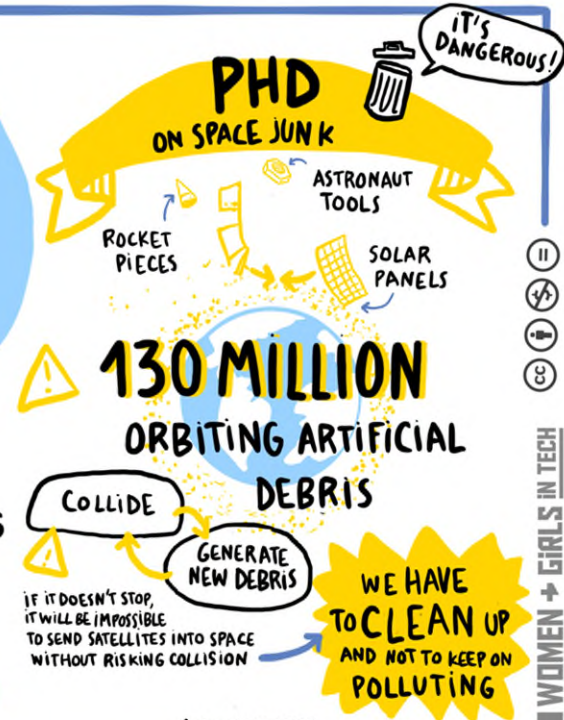
EDUCATION

- ★ BACHELOR'S DEGREE IN MECHANICAL ENGINEERING
- ★ MASTER'S DEGREE IN FLUID MECHANICS
- ★ PHD IN ASTRONOMY AT THE INSTITUTE FOR CELESTIAL MECHANICS AND COMPUTATION OF EPHEMERIDES (IMCCE)



FATOUMATA KEBÉ

@fatoumata.astro



CREATES EPHEMERIDES
TO SHARE HER PASSION
FOR **astronomy**
WITH THE GENERAL PUBLIC, SCHOOLS,
WORKING CLASS AREAS

GRACE HOPPER 1906 → 1992

"dare
& DO
IT'S
EASIER
TO ASK
FORGIVENESS
THAN IT IS
TO GET
PERMISSION"



I had the idea
of a PROGRAMMING LANGUAGE
based on English
to make CODING
simpler

IF (WEATHER = ☀)
THEN 🚲
ELSE (M)

THE mother
OF COBOL

(yet not the mother of the BUG)

THE BUG
Legend

1947

A MOTH STUCK INSIDE
A COMPUTER
CAUSES A CALCULATOR
BREAKDOWN
THE ANECDOTE HELPED
THE TERM
COMPUTER
BUG
GAIN POPULARITY

First actual case of bug

MOTH TAPED UP
INSIDE THE COMPUTER'S LOGBOOK



PROFESSOR
IN MATHEMATICS



1943 SHE ENLISTED
IN THE US MARINES

HER NAME WAS GIVEN
TO A SHIP OF THE US NAVY

SHE HELPED TO CREATE

THE **UNIVAC**

UNIVERSAL AUTOMATIC COMPUTER

FIRST ALL-ELECTRONIC DIGITAL COMPUTER



ONCE RETIRED, THE NAVAL RESERVES CALLED HER
BACK. SHE WORKED THERE UNTIL SHE WAS 80.

AMAZING grace

2016
PRESIDENTIAL MEDAL
OF FREEDOM
(POSTHUMOUSLY)



HEDY LAMARR

1914 → 2000

DURING WORLD WAR II, SHE AND HER FRIEND,
THE PIANIST **GEORGE ANTHEIL** IMAGINE
A TRANSMISSION CODE SYSTEM
THAT HELPS DECEIVE THE ENEMY
WHEN SENDING GUIDED TORPEDOS



you can be
a scientist
& glamorous

ACTRESS

HEDY STARTED
HER CAREER AS AN ACTRESS
IN GERMANY AT 17

IN 1932
HER PERFORMANCE IN "ECTASY"
BRINGS HER IN THE SPOTLIGHTS
OF **HOLLYWOOD**

SHE BECOMES
ONE OF THE MOST
POPULAR ACTRESS.
OF HER TIME

THE MOST BEAUTIFUL
WOMEN IN FILMS



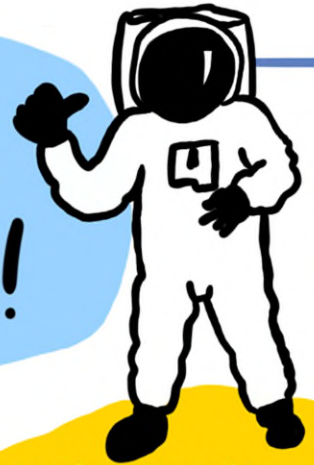
INVENTOR

THESE WORKS ARE
AT THE ROOF OF

- WIFI
- GEOLOCALISATION
- MOBILE TELEPHONY
- BLUETOOTH

WOMEN → GIRLS IN TECH

we helped man
walk on the moon!



THEIR STORY'S
TOLD IN THE NOVEL

*Hidden
figures*

BY MARGOT LEE SHETTERLY

ADAPTED AS A FILM



KATHERINE
JOHNSON

1918 → 2020

SHE CALCULATED
THE **APOLLO 11**
MISSION TRAJECTORY

DOROTHY
VAUGHAN

1910 → 2008

ACTING **SUPERVISOR**
OF THE WEST AREA COMPUTERS

MARY
JACKSON

1921 → 2005

FIRST AFRICAN-AMERICAN
WOMAN **ENGINEER** AT NASA

WOMEN → GIRLS IN TECH

I am
a COMPUTATIONAL
SCIENCE
specialist

thanks
to more WOMEN
& DIVERSITY
in tech, we can
change the world

HER FEMINIST GRANDFATHER
ENCOURAGES HER TO DO WHAT
SHE WANTS AND NOT TO WORRY
ABOUT WHAT THE OTHER PEOPLE
THINK



SLASHER

SCIENTIST EDITORIAL WRITER
ADVISOR TEACHER
ENTREPRENEUR



2009 PhD
IN DIGITAL MECHANICS
OF SOFT MATERIAL
AT MINES PARIS

✈️ MOVED TO THE USA

2011 JOINS THE MIT
TO WORK IN COMPUTATIONAL
BIOMECHANICS

TISSUE MODELLING
FOR POST-HEART ATTACK
REPAIR



2016
FOUND IN SILICO VERITAS
A CONSULTING FIRM
IN ALGORITHMS
& COMPUTER
SIMULATIONS

WHAT FOR?

PREDICTION,
UNDERSTANDING
OF PHENOMENA,
PROBLEM
SOLVING

I developed
a MATHEMATICAL LAW
to determine
the RISKS of HEAD INJURY
in case of
HEAD IMPACT

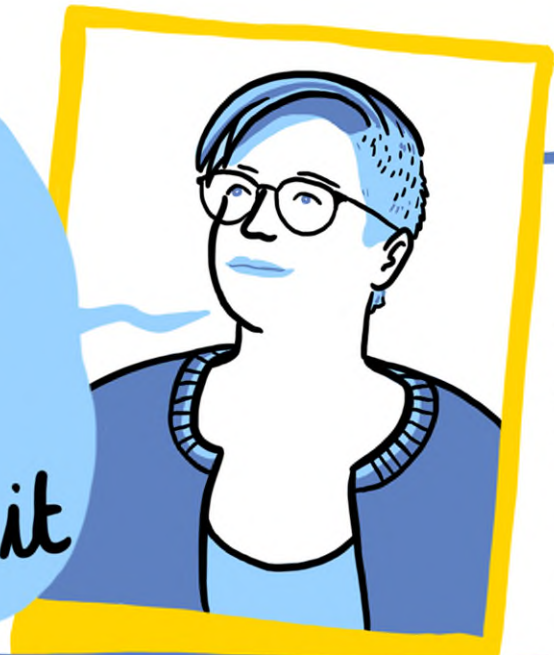


AURÉLIE JEAN

🐦 @Aurelie_JEAN 📷 @aureliejeanphd

WOMEN → GIRLS IN TECH

making
BIG DATA
a FAIR TOOL
will depend on
what we do with it



1999 PhD
IN MATHEMATICS

RESEARCHER
IN ALGEBRAIC GEOMETRY
AT THE MIT & BARNARD COLLEGE

JUST BEFORE THE 2008 CRISIS
SHE JOINED A COMPANY THAT ASSESSES RISK
FOR THE HOLDINGS OF HEDGE FUNDS
AND WALL STREET BANKS

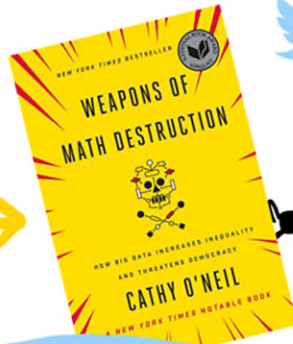



2011 SHE JOINED A START-UP THAT BUILDS
PREDICTIVE MODELS FOR RETAILERS

ALERT

we need to CONTROL
HOW THE ALGORITHMS
are DESIGNED

we must not ENTRUST
DECISION-MAKING
to ALGORITHMS



 @mathbabe dot org

IN 2011, SHE BECAME AN ACTIVIST
FOR THE OCCUPY WALL STREET
MOVEMENT



TODAY, SHE IS THE CEO OF ORCAA,
SPECIALIZED IN AUDITING ALGORITHMS

for INEQUALITIES
EDUCATION SECURITY EMPLOYMENT POLITICS
JUSTICE HEALTHCARE



WOMEN → GIRLS IN TECH

@cibi1974 pour

WOMEN → GIRLS IN TECH

THE EUREKA MOMENT

DRAWN TO TECH AND VIDEO GAMES
SINCE FOREVER, SHE'S BECOME PASSIONATE
ABOUT CODE SINCE SHE FOLLOWED
A COMPUTING CLASS, IN HER UPPER STUDIES

LOGICAL → EASY TO UNDERSTAND
PROBLEM → **SOLUTION**



A PIANO ENTHUSIAST
SINCE SHE'S 9,
TAPPING AWAY
ON A KEYBOARD FOR HOURS
IS NATURAL FOR HER

IF YOU'RE
INTERESTED
IN A SPECIFIC FIELD,
YOU CAN CODE
FOR IT

PROGRAMMING
IS A TOOL

ENGINEER
SCHOOL

I am
data scientist

at BNP PARIBAS
PERSONAL FINANCE
DATA LAB



CLAUDIA CAO

MISSIONS

- * RESEARCH
IN ARTIFICIAL
INTELLIGENCE (AI)
- * MODELLING CLIENT'S
NEEDS

SHE IS WORKING ON **JED-AI**
A WEB APP THAT'S
TO POPULARIZE AI
FOR ALL EMPLOYEES

SHE TOOK PART IN THE DESIGN
OF **QABI**, BNP PARIBAS
PERSONAL FINANCE DATA LAB
FIRST CHATBOT

WOMEN → GIRLS IN TECH

THE EUREKA MOMENT

2001 → SHE JOINS L'ATELIER BNP PARIBAS
START-UPS SHOW HER THAT TECH CAN BE
A MAGICAL TOOL TO CHANGE THE WORLD
AND PEOPLE'S LIVES



I love TECH
yet, I'm not
a TECHNICIAN

CHIEF DIGITAL
& ACCELERATION
OFFICER
@BNP PARIBAS CARDIF



NATHALIE DORÉ



A HOPE TO ERADICATE
SEVERE CONDITIONS
OR PUT AN END TO MORTAL
ROAD ACCIDENTS

PROJECTS
FOR NEW
CARDIF LAB'

→ CAREER JOURNEY →



EVENT
MARKETING

BUSINESS
DEVELOPMENT

INTERNATIONAL
DEVELOPMENT

DIGITAL
MARKETING

SILICON
VALLEY



IN 35
COUNTRIES



MISSION

ACCELERATE
BNP PARIBAS CARDIF
TRANSFORMATION
& DEVELOPPEMENT
WHILE HAVING
A POSITIVE IMPACT
THANKS TO TECH
AND INNOVATION

2 MAJOR ACHIEVEMENTS

#WOMENINTECH 2017 "SILICON VALLEY"
DELEGATION → WOMEN'S FORUM

UP-SKILL & RE-SKILL

TO TRAIN EMPLOYEES
FOR THE JOBS OF TOMORROW
UX DATA DESIGN

WOMEN → GIRLS IN TECH

I ❤️
the association
of HUMAN and
TECHNICAL questions



→ CAREER JOURNEY

→ SCIENTIFIC STUDIES → POLYTECHNIQUE

→ MINES PARIS → ENGINEER

→ REGIONAL BOARD
INDUSTRY, RESEARCH & ENVIRONMENT → FRENCH FINANCIAL MARKETS AUTHORITY

→ MANAGEMENT CONTROL → ACTUARIAL WORK → TECHNICAL & OPERATIONS EFFICIENCY
BNP PARIBAS CARDIF

THE EUREKA MOMENT

I've always found COMPLEX TOPICS FUN

I ❤️ LEARNING

TR² "AB" √x

PRIDE

MANAGED TO CONNECT THE WHOLE COMPANY

98% EMPLOYEES COULD WORK REMOTELY IN FEW DAYS

COVID19

it's IMPORTANT to UNDERSTAND the FINAL USER

MISSION RESPONSIBLE FOR THE INDUSTRIAL STRATEGY

- OPTIMIZES THE OPERATING PERFORMANCE
- ANTICIPATES, INNOVATES

PAULINE LECLERC-GLORIEUX

WOMEN → GIRLS IN TECH

I am
an INFORMATION DESIGNER
& ARTIST

I ♥
creating
with
DATA

DATA
IS AT THE
HEART
OF HER
CREATIONS

NECKLACE
THAT GIVES
TANGIBLE
FORM TO AIR
QUALITY
DATA



BACHELOR
OF FINE ARTS
GRAPHIC DESIGN
COLORADO
STATE UNIVERSITY

STUDIES

MASTER
OF ARTS
COMMUNICATION
DESIGN
CENTRAL
SAINT MARTINS



DATA
VISUALISATION

LONDON
BROOKLYN



2015 SHE STARTS **Dear Data**, A ONE-YEAR
CORRESPONDENCE WITH **Georgia Lupi**
104 POSTCARDS WITH **FREEHAND INFOGRAPHICS**
TO GET TO KNOW EACH OTHER THROUGH **DATA**

2013 SHE CREATES
**Relationship
Dance Steps**
THAT SHOWS
COUPLE EARLY STAGES
OF INTERACTION
ON **f**

2016 **Dear Data**
IS ACQUIRED
BY **MoMA**
(MUSEUM OF MODERN ART)
AS PART OF THEIR
PERMANENT
COLLECTIONS

STEFANIE POSAVEC

@stefpos



CLOUD Architect

The **CLOUD** is presented as **COMPUTING** in the **CLOUDS**



ANALYSIS

Study the **EXISTING DATA STORAGE** and **SHARING SYSTEM** & **DETERMINE** the **REQUIREMENTS**



DESIGN

Defines the **GENERAL CONFIGURATION** of the **CLOUD** to meet the **REQUIREMENTS**



SUPERVISE

ASSIST, ADVISE and even **DIRECT** the **IMPLEMENTATION** of the **CLOUD** in collaboration with the **PROJECT MANAGER**

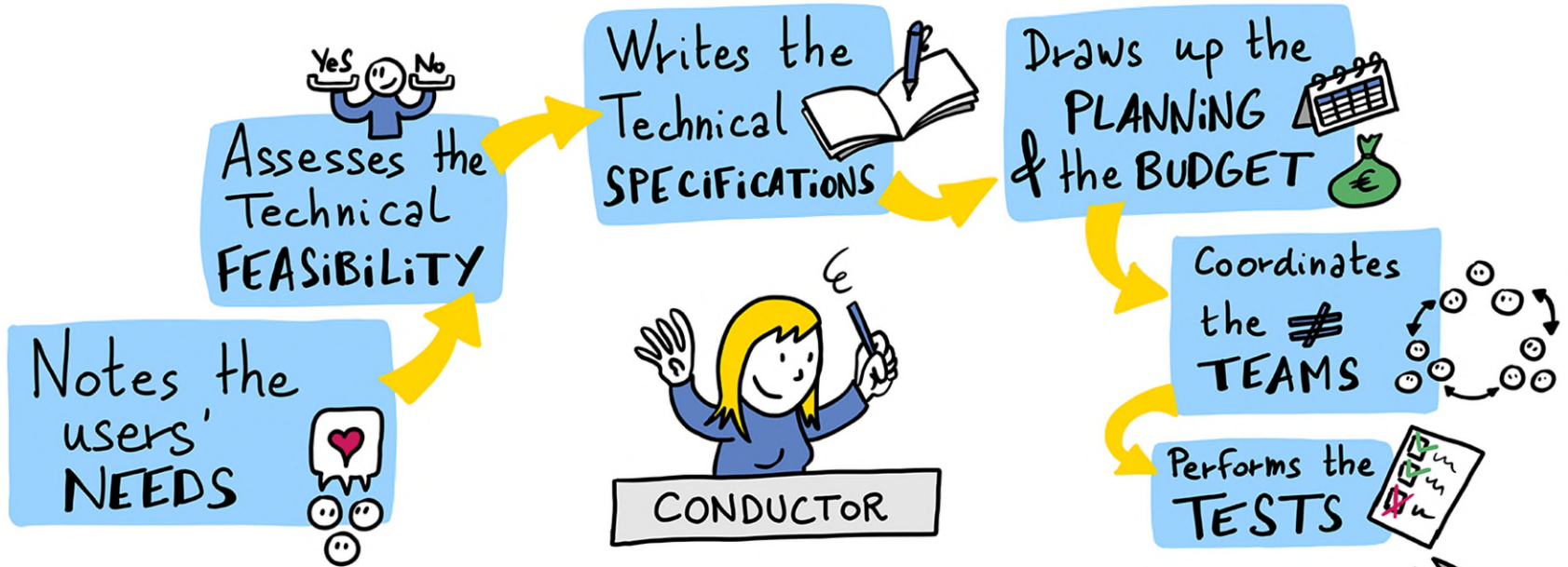


The **CLOUD ARCHITECT** must **DEFINE TECHNICAL SOLUTIONS** & **ORGANISE** the **TRANSITION** to servers **OUTSIDE** the **Company**

→ Having a **STRATEGIC** & **FUNCTIONAL VISION** while **MASTERING** technical **SECURITY**, and **PRIVACY** aspects



WEB Project Manager



 The WEB PROJECT MANAGER is IN CHARGE of CREATING, IMPLEMENTING & MANAGING Web Projects.



- ★ Technical Knowledge
 - ★ Organisation
 - ★ Team Spirit
 - ★ Supervision
 - ★ Communication
- 

Data Scientist

1. Understands the **PROBLEM**



2. Finds a **STATISTICAL MODELLING**



3. Identifies & Gathers the Relevant **DATA**



4. **ANALYSES** the **DATA**

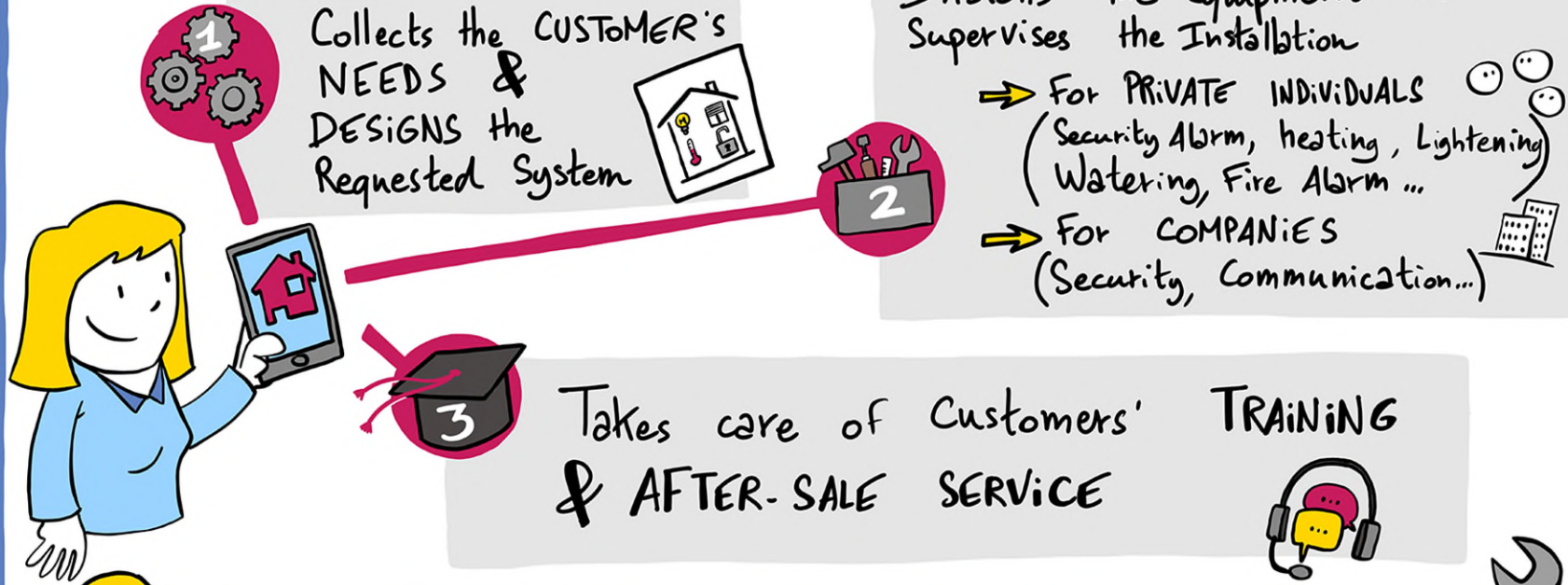


The Data Scientist **ANALYSES, EXPLOITS & MAKES SENSE** out of significant volumes of **DATA** from diverse sources (**BiG DATA**)

- ★ Expert in **STATISTICS & COMPUTING**
- ★ Customer- & **Business**-oriented
- ★ Good **MARKETING** Knowledge



Home Automation Engineer

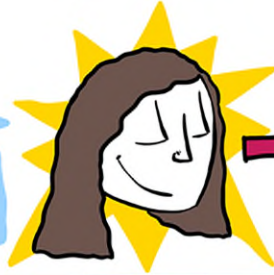


The Home Automation Engineer's WORK consists in MAKING HOMES SMARTER thanks to available COMPUTER & ELECTRONIC Solutions

- ★ Electricity
- ★ Electronics
- ★ Information Technology
- ★ Heating / Air Conditioning
- ★ Telecommunication ...

ERGONOMIST

The **ERGONOMIST** plays the role of an **ADVISOR**



ANALYSES the **USERS'** **BEHAVIOURS**



DEFINES the basic **ERGONOMICS**



DRAFTS **FUNCTIONAL SPECIFICATIONS**



TESTS the **RESULTS** of her **OPTIMISATIONS**



HELPS the **USER** **GET TO GRIP** with the **CHANGES**



The **GOAL** of the **ERGONOMIST** is to **IMPROVE** the **HUMAN - MACHINE** **DIALOGUE**

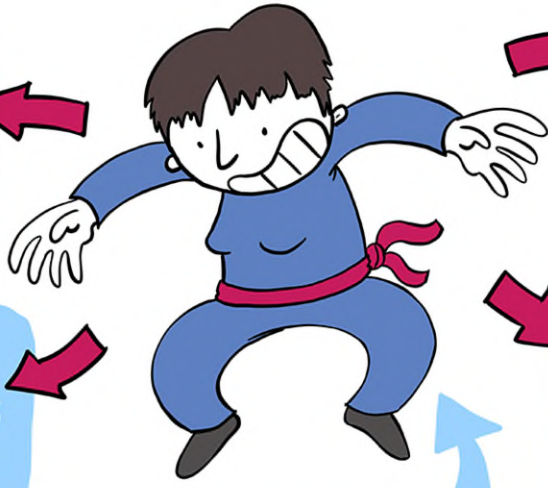


- ★ Good knowledge of the **WEB** & in **IT**
- ★ **ANALYTICAL** skills
- ★ Good **LISTENING** qualities & **EMPATHY**



GROWTH-HACKER

MAIN GOAL
Acquiring new CUSTOMERS
thanks to MARKETING CAMPAIGNS



MARKETING
"NINJA"

ANALYZES
the current CAMPAIGNS


→ INCREASES the BUDGET
dedicated to successful campaigns

→ CUTS the BUDGET to
those that aren't working



STUDIES the
customers' behaviors

→ ADAPTS the CAMPAIGNS
& APPROACHS
accordingly






OPTIMIZES her DATA

AUTOMATES her PROCESSES

FINDS new

TESTS new CAMPAIGNS

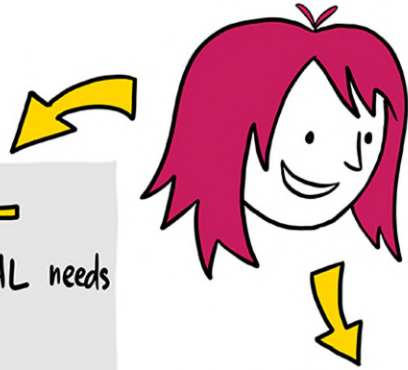


The GROWTH-HACKER is
putting her SKILLS to use to
MAXIMIZE the GROWTH
of a COMPANY while using
as little RESSOURCES as possible.



- ★ Versatility
 - ★ WEB, SEO & Social MEDIA skills
 - ★ Good MARKETING knowledge
- 

Low Tech Engineer



The SOLUTIONS I'm implementing have to BE ...

USEFUL

They meet ESSENTIAL needs

- 🔌 Power
- 🍴 Food
- 💧 Water
- 🗑️ Waste Management
- 🏠 Accommodation
- 🚗 Transportation
- ❤️ Health...

SUSTAINABLE

From PRODUCTION to DISTRIBUTION & END-of-LIFE, they're designed to BE

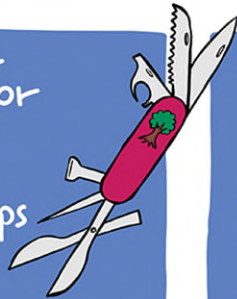
- 👊 SOLID
- 🔧 REPAIRABLE
- ♻️ RECYCLABLE

ACCESSIBLE

Little PRICeY & EASY to USE
↓
Accessible to MOST PEOPLE



Real ALL-Rounder for ENERGY TRANSITION,
The Low Tech ENGINEER helps to PRODUCE & CREATE in a SUSTAINABLE & EASY manner.



- ★ Good knowledge of the Environmental Issues
- ★ Creativity
- ★ Inventiveness
- ★ Open - Mindedness



Virtual Reality Engineer

ANALYSES requests



CONCEPTUALIZES the Project of 3D Universe Creation



MANAGES the Project & DIRECTS a Multidisciplinary team



Steady IMPROVEMENT



Field of Application

Aeronautics



Automobile Industry



Medical Sector



Video Games



etc...



In charge of Creating VIRTUAL UNIVERSES in 3 Dimensions



★ Masters Virtual Technology



↳ SOFTWARE & HARDWARE

- ★ Rigour and Organization
- ★ Creativity



DRONE PILOT

BEFORE the FLIGHT



Studies the FILE & Prepare the FLIGHT PLAN



Prepares the EQUIPMENT



Enquires about the WEATHER CONDITIONS



Relay the FLIGHT PLAN to the AIR TRAFFIC CONTROL CENTRES



DURING the FLIGHT



Has a GOOD COMMAND of the DRONE



Abides the SAFETY RULES



Takes EXPLOITABLE SHOTS

AFTER the FLIGHT



Writes a MISSION REPORT



Maintains her DRONE



In the CIVIL Life or the ARMY,
the DRONE PILOT



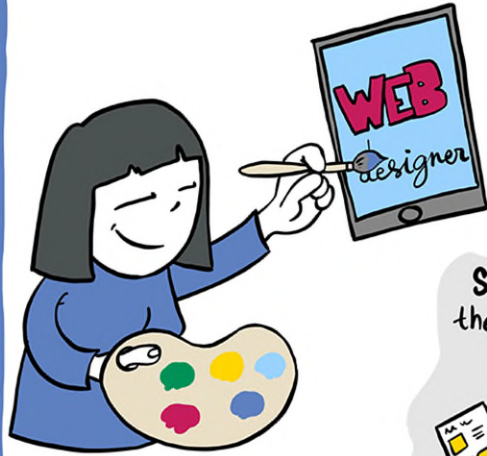
controls DRONE MOVEMENTS
according to the
ASSIGNED MISSIONS.



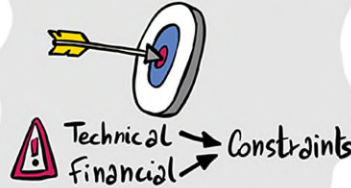
- ★ Excellent sens of DIRECTION
- ★ Rigour
- ★ Self-reliance
- ★ Proactivity



WEB Designer



TARGET the NEEDS



DEVELOPING the GRAPHIC Design & VISUAL identity



Creating a PROTOTYPE



SUPERVISE the INTEGRATION



Ensure post-DELIVERY Follow-UP



Optimize SEARCH ENGINE OPTIMIZATION



DESIGN TRAINING MATERIALS



Both an ARTIST & a COMPUTER SCIENTIST, the WEB DESIGNER specializes in CREATING ERGONOMIC web INTERFACES

- ★ GRAPHIC SOFTWARES SKILLS (Photoshop, Illustrator...)
- ★ Understanding of WEB CONSTRAINTS
 - ERGONOMICS
 - SEARCH ENGINE OPTIMIZATION...

