

# Bhuvan Kumar GUNESSEE

## Software Programmer



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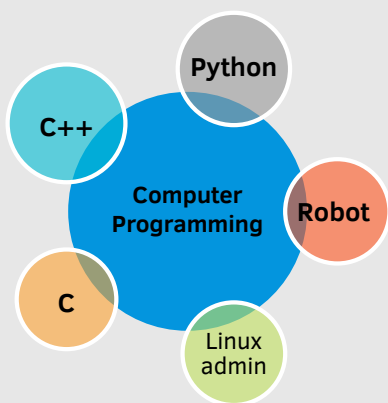


/in/bkgunessee/



Echo327

## Skills



## Other Skills

MATLAB/GNU Octave, LaTeX

## Familiar OS

- Administration  
Linux
- User  
Linux, Windows, Chrome OS, Android, and iOS

## Language Proficiency Tests

### English - C2 Level

Cambridge (CAE) - June 2019  
Score: 203/210 (C2 Level)

### French - B2 Level

DELFI B2 - June 2012  
Score: 64/100 (B2 Level)

## Personal Interests

Core Gamer.  
Computer Hardware.  
Computer Programming.  
New Technology.

## Work Experience

- May 2022 - (current) **Consulting Software Engineer** AUSY Toulouse  
Airbus Operations  
•New features and anomaly correction on existing **C++** code.  
•Integration testing using **Robot Framework**.
- Feb 2018 - Aug 2021 **Cartography of Asphaltene Systems: Physico-Chemical Properties and Reactivity** IPREM-UPPA, Pau  
Research Activity  
•ReaxFF Force Field Parameterisation using Genetic Algorithms (GA)  
•Ab Initio Calculations and MD Simulations  
•Custom **Python** Codes and Scripts for automatic Batch Job Execution and Monitoring, Data Extraction, Processing and Analysis
- Sep 2018 - Aug 2020 **Teaching Assistant** UPPA, Pau  
Chemistry Department : Tutorials and Practicals

## Projects

- 2022 **MP TEST ENABLERS** AUSY Toulouse  
Airbus Operations  
**C++**, **Robot Framework**, ARINC
- 2016 **2nd Year of Masters** Paul Sabatier University  
Thesis: Monte Carlo study of 2D Ising model programmed in **Fortran**.
- Jun 2016 **Production of photovoltaic cells** AIME, Toulouse  
Internship: Production and test of photovoltaic cells (from Si wafers).
- 2015 **1st Year of Masters** Paul Sabatier University  
Thesis: 10-body model of Planetary Orbits.  
Numerical resolution of differential equations (programmed in **C**).
- 2014 **3rd year of Bachelor** Paul Sabatier University  
Thesis: Model of the re-Entry of a space shuttle in earth atmosphere using **MATLAB**.

## Education

- Ongoing **Online Courses** Full List (with description) on [LinkedIn](#)  
Coursera, edX, Udemy, etc.
- 2022 **POEI C++ AUTOSAR Development** AJC Formation  
Embedded Systems
- 2015 - 2017 **Masters in Physics** Paul Sabatier University(France)  
Fundamental and Applied Physics
- 2012 - 2015 **Bachelor in Fundamental Physics** Paul Sabatier University(France)  
Fundamental Physics
- 2010 - 2011 **HSC Cambridge 'A' Level (CIE)** Adolphe de Plevitz SSS (Mauritius)  
Main: Physics, Chemistry, Mathematics; Subsidiaries: Biology, General Paper
- 2008 - 2009 **SC Cambridge 'O' Level (CIE)** Adolphe de Plevitz SSS (Mauritius)  
Physics, Chemistry, Biology, English, French, Mathematics, Additional Mathematics

## Internships

- Feb 2017 - Jul 2017 **Atomic Scale Modelling of Ruthenium on Gold** LAAS-CNRS, Toulouse  
First principles study (DFT) of the deposition of Ruthenium (Ru) on Gold (Au)
- Mar 2016 - May 2016 **Model of the reflectivity of 2D Surfaces** CEMES-CNRS, Toulouse  
•Modelling using Fresnel equations and Transfer Matrix Method (TMM) in MATLAB/GNU Octave of the reflectivity of thin films.  
•A **Graphical User Interface (GUI)** was developed in **MATLAB** to allow an end user to dynamically modify the thickness and refractive index (different materials) of the thin films.