UNIVERSITY OF CAMBRIDGE

Improving your CV Careers Workshop
Computer Lab
Nov 2016

Susan Gatell
Careers Adviser

Careers Service

What's the purpose of your application?

- Keep you **out of the reject pile**
- To **quickly** get across your value and tech credentials from a scan read
- To provide **evidence** that you'll be a good match

Thinking like a Recruiter

Positive assumptions:

- Cambridge = smart
- Learn fast
- Already competent developer
- You'll have a lot of options

Prejudices or concerns:

- Solo or team player?
- Communications skills?
- Are you the best?
- What are your gaps?

The CV checklist – 3 things to get right

- ✓ Content
- ✓ Clarity
- ✓ Job Match

Clarity - Design does matters

Education

2012–2015 **University of Cambridge**, *BA in Computer Science.*

2008–2012 **Tudor Vianu National High School of Computer Science**, *mathematics-informatics (intensive Computer-Science section)*, Bucharest, *Romanian Baccalaureate overall mark: 9.5/10.*

Work Experience

2011 **Summer internship**, *ProSitCons S.R.L.*, Bucharest.

ProSit Cons S.R.L. is a Romanian company which provides Enterprise Resource Planning(ERP) software solutions. I had the opportunity to gain insight into the development of the "real" software that must comply with costumer requirements.

Awards

2005–2011 **National Olympiad of Computer Science**, Romania.

My passion for computer science started in elementary school; ever since then I have spent a great deal of time learning advanced level algorithms and solving problems on many CS training sites for Olympiads. This sustained training has helped me qualify, compete at and win many awards at various Computer Science and mathematics competitions. Of these, my most notable results are:

- Silver Medal at the Romanian National Olympiad of Computer Science - 2008, 2009, 2010, 2011
- Qualified for the Romanian National Olympiad of Computer Science - 2005 to 2011

Skills

Coding Good: C/C++, Java Basic: Ruby, Javascript, SML

Tools Linux(Arch, Ubuntu, Fedora), Oracle Databases, Git, LaTeX

Other Aglile Development

Languages

Romanian **Mothertongue**

English **Fluent**

Address:	48 New Road Esher Surrey KT10 9NU	
Date of Birth:	16/09/1992	
Email:	jmc223@cam.ac.uk (university) jamro1149@gmail.com (personal)	
Phone:	07921970017	

Education

2004-2011:	Reed's School, Cobham	
GCSE results:	4 A*s, 3 As, 2 Bs	
AS level:	Chemistry	A
	Economics	A
	Mathematics	A
	Further Mathematics	A
	Physics	A
A level:	Mathematics	A
	Further Mathematics	A*
	Physics	A
STEP:	Paper II	2
	Paper III	1

Clarity - Design

EDUCATION

University of Cambridge 2013 - 2014
Master of Philosophy - Advanced Computer Science

Queen Mary, University of London (QMUL) 2012 - 2013
Beijing University of Posts and Telecommunications 2009 - 2012
Bachelor of Science - Telecommunication Engineering with Management
G.P.A. 89.2/100.0 (First Class Honor), **Top 2% (8th/355)** in department

Relevant Modules: Software Engineering, Internet Applications, Introductory to Java Programming

WORK EXPERIENCE

Research Assistant - Tsingshua University, China Jun - Sep 2013
- Worked at Tsinghua Center for Speech and Language Technologies (CSLT)
- Explored whether topic model algorithm could be applied into people name disambiguation in web page
- F-measure on Second Web People Search Evaluation Workshop (WePS2) dataset was 0.80, 4th/17 compared to other teams

Technical Assistant - QMUL Jan - Mar 2013
- Worked at Center for Digital Music (C4DM) for melodic prediction research
- Analyzed people's emotional response to different types of music
- Designed interactive software to collect people's expectation to specific notes in melody

PROJECTS

Cambridge Transport Hackathon, University of Cambridge Oct 2013
- Designed a journey planner app based on Google Maps API
- This app accepted places people want to visit in one day
- It automatically gave the optimal way in which order people should visit and how to get there

Olympic Tweets Classification, Final Year Project at QMUL Sep 2012 - Apr 2013
- Implemented Naive Bayes to classify Tweets into different Olympic hashtags

Car Parking System, Software Engineering Coursework Feb 2012 - May 2012
- Led, taught and allocated group members to complete the report and software
- Led a below-average group to earn an above-average grade

FTP Server May 2012
- Built a FTP server by C in Linux

SKILLS

Languages: C#, Java, C/C++ (strong), SQL, Python, Haskell, ML (proficient), Prolog, MATLAB, JavaScript, CoffeeScript, HTML (basic)
Systems: Windows, Unix
Software: Visual Studio, Eclipse, git, OpenGL, Elasticsearch

EDUCATION

2013 - Present – M.Phil. ACS – University of Cambridge

2010 - 2013 – BA (hon.) Computer Science – University of Cambridge
First year exams: First
Second year exams: First
Third year exams: First

2009 - Summer School "Modern Computational Science" – University of Oldenburg
Two week summer school. Wide range of topics, such as random number generation, simulations in statistical physics, numerical differential equation solving, computational fluid dynamics, quantum chemistry, artificial neural networks and systems verification.

2007 - 2008 – Algorithms and Data Structures – University of Bielefeld
Classes on Algorithms and Data Structure part of the first year Computer Science course of the University of Bielefeld. Attended this 6 hour per week course while still going to school. Obtained grade of 1.0 (best possible grade) in end of year examinations.

WORK EXPERIENCE

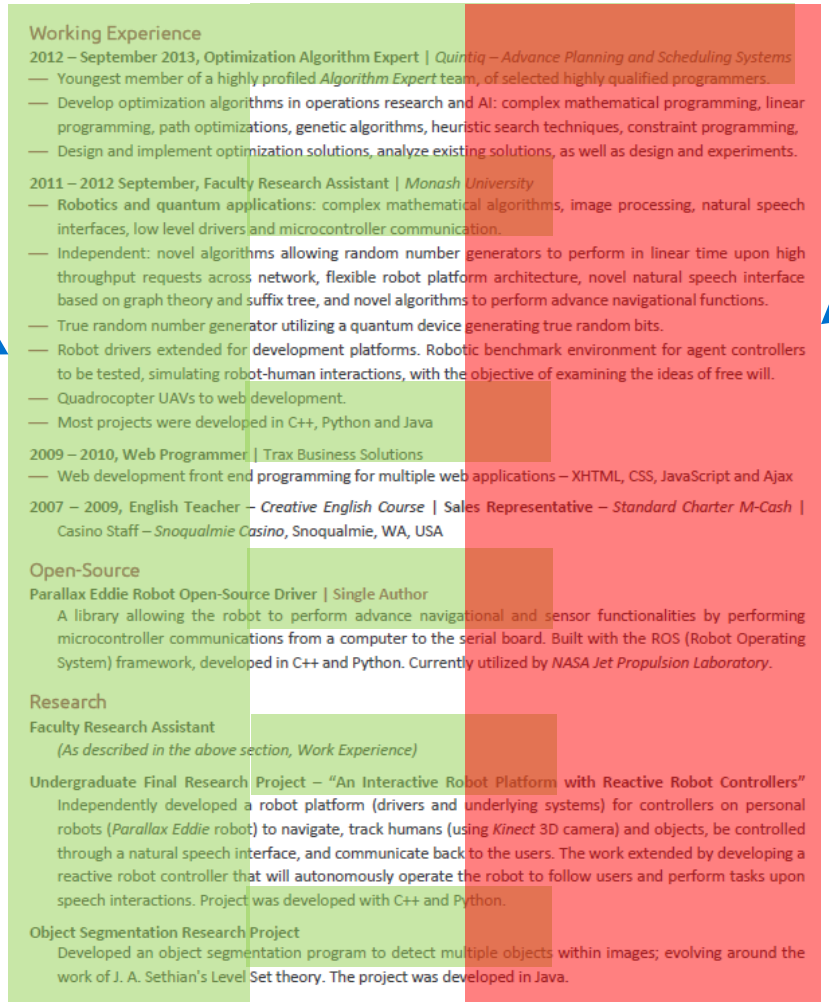
Palantir Technologies – Forward Deployed Engineer – Summer 2013, 3 Months

- Implemented backend for typeahead functionality for the Palantir Phoenix database using Elasticsearch
- Designed and implemented APIs to expose this functionality to other Palantir systems
- Integrated typeahead with web frontend, using CoffeeScript, Handlebars and select2
- Worked on system for data import

Clarity – Top CV real estate

Where the eye goes

The dead zone



Working Experience

2012 – September 2013, Optimization Algorithm Expert | *Quintiq – Advance Planning and Scheduling Systems*

- Youngest member of a highly profiled *Algorithm Expert* team, of selected highly qualified programmers.
- Develop optimization algorithms in operations research and AI: complex mathematical programming, linear programming, path optimizations, genetic algorithms, heuristic search techniques, constraint programming,
- Design and implement optimization solutions, analyze existing solutions, as well as design and experiments.

2011 – 2012 September, Faculty Research Assistant | *Monash University*

- **Robotics and quantum applications**: complex mathematical algorithms, image processing, natural speech interfaces, low level drivers and microcontroller communication.
- Independent: novel algorithms allowing random number generators to perform in linear time upon high throughput requests across network, flexible robot platform architecture, novel natural speech interface based on graph theory and suffix tree, and novel algorithms to perform advance navigational functions.
- True random number generator utilizing a quantum device generating true random bits.
- Robot drivers extended for development platforms. Robotic benchmark environment for agent controllers to be tested, simulating robot-human interactions, with the objective of examining the ideas of free will.
- Quadrocopter UAVs to web development.
- Most projects were developed in C++, Python and Java

2009 – 2010, Web Programmer | Trax Business Solutions

- Web development front end programming for multiple web applications – XHTML, CSS, JavaScript and Ajax

2007 – 2009, English Teacher – *Creative English Course* | **Sales Representative** – *Standard Charter M-Cash* | Casino Staff – *Snoqualmie Casino*, Snoqualmie, WA, USA

Open-Source

Parallax Eddie Robot Open-Source Driver | Single Author

A library allowing the robot to perform advance navigational and sensor functionalities by performing microcontroller communications from a computer to the serial board. Built with the ROS (Robot Operating System) framework, developed in C++ and Python. Currently utilized by *NASA Jet Propulsion Laboratory*.

Research

Faculty Research Assistant

(As described in the above section, Work Experience)

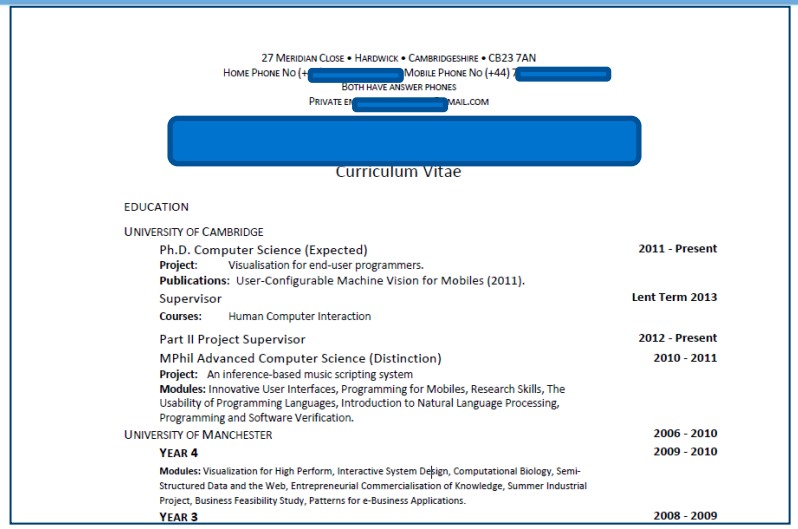
Undergraduate Final Research Project – "An Interactive Robot Platform with Reactive Robot Controllers"

Independently developed a robot platform (drivers and underlying systems) for controllers on personal robots (*Parallax Eddie* robot) to navigate, track humans (using *Kinect* 3D camera) and objects, be controlled through a natural speech interface, and communicate back to the users. The work extended by developing a reactive robot controller that will autonomously operate the robot to follow users and perform tasks upon speech interactions. Project was developed with C++ and Python.

Object Segmentation Research Project

Developed an object segmentation program to detect multiple objects within images; evolving around the work of J. A. Sethian's Level Set theory. The project was developed in Java.

Clarity – Do the “first screen” test



27 Meridian Close • Hardwick • Cambridgeshire • CB23 7AN
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Both have answer phones
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[redacted]

Curriculum Vitae

EDUCATION

UNIVERSITY OF CAMBRIDGE

Ph.D. Computer Science (Expected) — **2011 - Present**
Project: Visualisation for end-user programmers.
Publications: User-Configurable Machine Vision for Mobiles (2011).

Supervisor — **Lent Term 2013**
Courses: Human Computer Interaction

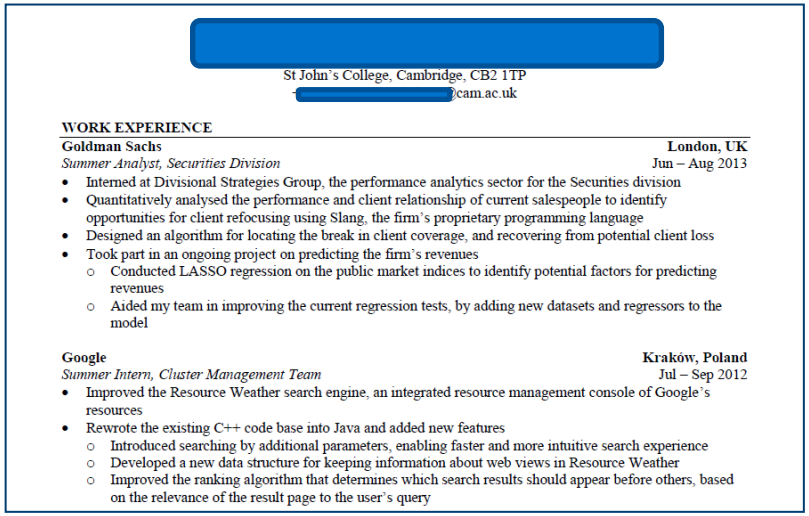
Part II Project Supervisor — **2012 - Present**

MPhil Advanced Computer Science (Distinction) — **2010 - 2011**
Project: An inference-based music scripting system
Modules: Innovative User Interfaces, Programming for Mobiles, Research Skills, The Usability of Programming Languages, Introduction to Natural Language Processing, Programming and Software Verification.

UNIVERSITY OF MANCHESTER — **2006 - 2010**

YEAR 4 — **2009 - 2010**
Modules: Visualization for High Perform, Interactive System Design, Computational Biology, Semi-Structured Data and the Web, Entrepreneurial Commercialisation of Knowledge, Summer Industrial Project, Business Feasibility Study, Patterns for e-Business Applications.

YEAR 3 — **2008 - 2009**



[redacted]

St John’s College, Cambridge, CB2 1TP
[redacted]@cam.ac.uk

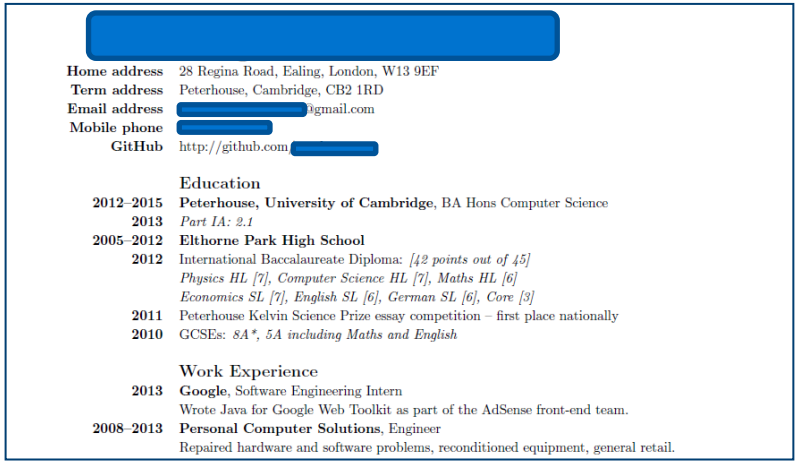
WORK EXPERIENCE

Goldman Sachs — **London, UK**
Summer Analyst, Securities Division — Jun – Aug 2013

- Interned at Divisional Strategies Group, the performance analytics sector for the Securities division
- Quantitatively analysed the performance and client relationship of current salespeople to identify opportunities for client refocusing using Slang, the firm’s proprietary programming language
- Designed an algorithm for locating the break in client coverage, and recovering from potential client loss
- Took part in an ongoing project on predicting the firm’s revenues
  - Conducted LASSO regression on the public market indices to identify potential factors for predicting revenues
  - Aided my team in improving the current regression tests, by adding new datasets and regressors to the model

Google — **Kraków, Poland**
Summer Intern, Cluster Management Team — Jul – Sep 2012

- Improved the Resource Weather search engine, an integrated resource management console of Google’s resources
- Rewrote the existing C++ code base into Java and added new features
  - Introduced searching by additional parameters, enabling faster and more intuitive search experience
  - Developed a new data structure for keeping information about web views in Resource Weather
  - Improved the ranking algorithm that determines which search results should appear before others, based on the relevance of the result page to the user’s query



[redacted]

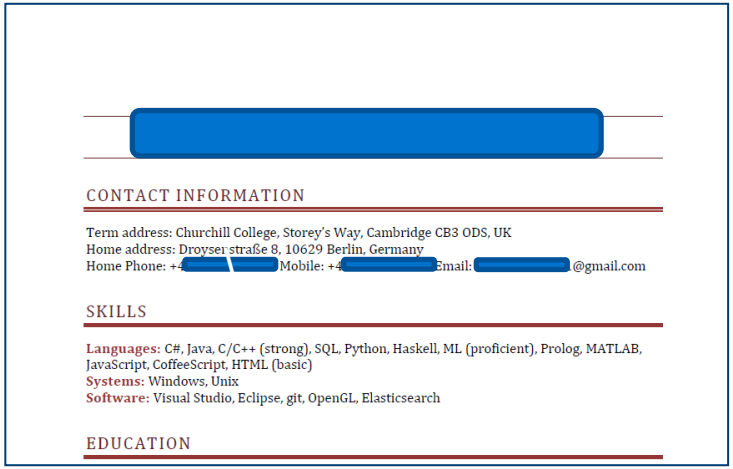
Home address 28 Regina Road, Ealing, London, W13 9EF
Term address Peterhouse, Cambridge, CB2 1RD
Email address [redacted]@gmail.com
Mobile phone [redacted]
GitHub http://github.com/[redacted]

Education

2012–2015 **Peterhouse, University of Cambridge**, BA Hons Computer Science
2013 *Part IA: 2.1*
2005–2012 **Elthorne Park High School**
2012 International Baccalaureate Diploma: *[42 points out of 45]*
Physics HL [7], Computer Science HL [7], Maths HL [6]
Economics SL [7], English SL [6], German SL [6], Core [3]
2011 Peterhouse Kelvin Science Prize essay competition – first place nationally
2010 GCSEs: *8A*, 5A including Maths and English*

Work Experience

2013 **Google**, Software Engineering Intern
Wrote Java for Google Web Toolkit as part of the AdSense front-end team.
2008–2013 **Personal Computer Solutions**, Engineer
Repaired hardware and software problems, reconditioned equipment, general retail.



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CONTACT INFORMATION

Term address: Churchill College, Storey’s Way, Cambridge CB3 ODS, UK
Home address: Droysenstraße 8, 10629 Berlin, Germany
Home Phone: +4[redacted] Mobile: +4[redacted] Email: [redacted]@gmail.com

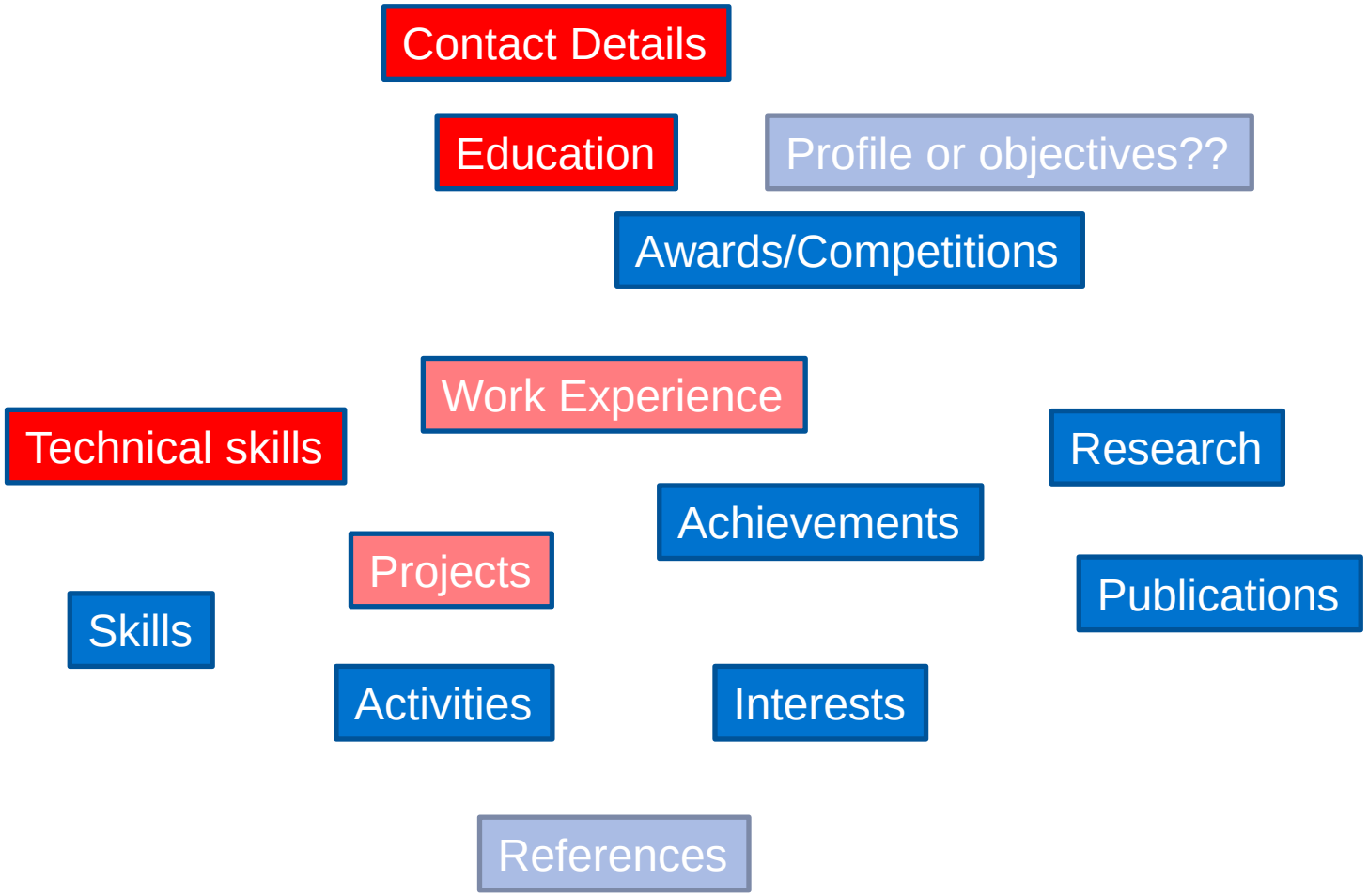
SKILLS

Languages: C#, Java, C/C++ (strong), SQL, Python, Haskell, ML (proficient), Prolog, MATLAB, JavaScript, CoffeeScript, HTML (basic)
Systems: Windows, Unix
Software: Visual Studio, Eclipse, git, OpenGL, Elasticsearch

EDUCATION

Content - Building Blocks

Content - Building Blocks



Content - Education

EDUCATION

2011–2014	**Gonville and Caius College, University of Cambridge**	
	BA Hons Computer Science (with Mathematics)	
	Predicted grade: II.1	
2004–2011	**Nottingham High School for Boys, Nottingham**	
	A levels:	Maths (**A***), Further Maths (**A***), Physics (**A**), Chemistry (**A**)
	GCSEs:	(Including Maths and English); **8A*s, 3As**
	STEP Mathematics:	STEP I (**1**), STEP II (**1**), STEP III (**1**)

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2013 - Present – M.Phil. ACS – University of Cambridge

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Content – Education…how much to include?

University of Cambridge (2013-2014): MPhil Advanced Computer Science.

- Member of Christ's College, Cambridge.

Aberystwyth University (2008-2012): BEng Software Engineering (including industrial year).
Academic Awards:

- Best Computer Science Graduate (2012).
- Gwobr Elsie Pritchard Prize for Aberystwyth University (2012).
- Evan Morgan Scholarship for Computer Science for Aberystwyth University (2008).
- Excellence Bursary for Aberystwyth University (2008).

Final Year Performances:

- Open Source Development Issues - 88%.
- Agile Methodologies - 84%.
- Engineering Knowledge Based Systems - 83%.
- Professional Issues in Software Engineering - 83%.
- Developing Internet-Based Applications - 81%.
- Internet Services Administration - 73%.
- Dissertation - 69%.
- Formal Methods in Software Engineering - 65%.

Selected Previous Performances (Average 77%):

- Introduction to Communications and Telematics - 88%.
- User Centred Design and Human Computer Interaction - 86%.
- Modelling Persistent Data - 85%.
- Mobile, Embedded and Wearable Technology - 83%.
- Advanced Mathematics Driving License for Computer Science - 81%.

Llanidloes High School (2001-2008).

A-Levels (500 UCAS Points):

- IT - A.
- Maths - A.
- History - A.
- English - B.

AS-Levels:

- Critical Thinking - B.

GCSEs (7 A* & 3 A) including:

- ICT - A*.
- Business Studies - A*.
- English Language & Literature - A* A*.
- Science (Double Award) – A* A*.
- Mathematics - A.

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UNIVERSITY OF CAMBRIDGE

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Project: Visualisation for end-user programmers.
Publications: User-Configurable Machine Vision for Mobiles (2011).

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YEAR 4 — **2009 - 2010**
Modules: Visualization for High Perform, Interactive System Design, Computational Biology, Semi-Structured Data and the Web, Entrepreneurial Commercialisation of Knowledge, Summer Industrial Project, Business Feasibility Study, Patterns for e-Business Applications.

YEAR 3 — **2008 - 2009**
Project: Re-implementation of Microsoft AutoCollage **Modules:** Applying UML and Patterns, Concurrency, Theory of Games and Game Models, Advanced Databases, Computer Vision, Model - Based Software Design, Third Year Project, Enterprise Management, Managing Finance in Enterprise, Data Integration.

YEAR 2 — **2007 - 2008**
Modules: Fundamentals of Databases, Imperative Programming with C and C++, Operating Systems, Computer Networks, The Implementation and Power of Computer Languages, Software Engineering, Practical and Transferable Skills.

YEAR 1 — **2006 - 2007**
Modules: Object Oriented Programming with Java, Mathematical Techniques for Computer Science, A Computational Model, Reasoning about Programs, The Underlying Machine, Artificial Intelligence Fundamentals, First Year Team Project.

BRADFORD GRAMMAR SCHOOL — **1996 - 2006**

A Level	ICT (A), Business Studies (A), Mathematics (B).
AS Level	ICT (A), Mathematics (B), Business Studies (B), Physics (C).
GCSE	A*, A, A, A, A, A, A, B, B, C

Content – Include a Profile or Objective at the top?

OBJECTIVE

Software developer using clear and reliable code to create bespoke products.

Career Objectives.

I wish to become a highly competent senior software engineer for a reputable company. I believe that I possess the dedication, motivation, business knowledge and technical skills in order to fulfil my potential and achieve this target. Through my prior employment at GlaxoSmithKline and Goldman Sachs, I have proven myself able to perform at the highest level and under considerable pressure. This, in addition to key team-working skills developed over a number of years and a competent background in academia, represented by my First Class Honours Degree, makes me a fine graduate or experienced hire candidate within the corporate sector.

Career Objective

I am a lifelong learner. Nothing is more satisfying to me than absorbing knowledge and producing intellectual work, specifically solving problems algorithmically in the field of computer science. It requires dedication and commitment, but they will always be offset by the intellectual growth in reward. I am passionate to pursue this career path; solving complex algorithms and applying them to actual life problems, while seeking the opportunity to make even the smallest difference to the world, or at least gain the knowledge that will eventually allow me to do so.

Content – Profiles

PERSONAL SUMMARY
In my third year, I'm looking to demonstrate and expand my skills and enthusiasm into a meaningful career in software engineering. I'm analytical, creative and hard working. I have developed strong interpersonal skills and a logical approach to everything through academia, work and extra-curricular activities. I am detail-orientated and used to working under pressure.

Profile

I am a confident student in my second year of studying Computer Science at The University of Cambridge, with experience leading and motivating others as well as working as part of a team. I am searching for a 2015 summer internship or placement as a software engineer/in the finance sector/in the technology industry (depending on what I am applying for.

Personal Profile

An enthusiastic, hardworking computer science student who is particularly interested in the mathematical and theoretical side of the subject.

Content - Technical skills

TECHNICAL SKILLS

Languages (self taught)

- **C/C++** - 10+ years experience
- **Python** - for client/server applications
- **PHP** - together with HTML and CSS for website development
- **FORTRAN90** - HPC simulations

Libraries

- **Boost** - for high-quality ensemble calculations
- **OpenMP/MPI** - threading code on 8-core desktops to 300-core HPCs.

Systems

- **git** - version control
- **gdb** and **valgrind** - Avoided slow memory leaks or inefficient code for running long numerical integrations.
- **MySQL** - Used in administrator role, including database design.
- **Linux** - including bash scripting and data analysis via awk

Relevant Experience

WPF, C#, .NET	Improved usability of FX trading applications at Morgan Stanley by iterating on the interface to present data more intuitively, working with a team of 3	2012
Python	Learnt about the different technology platforms used at JP Morgan during a 'Hackathon' & Spring Week in Technology	2012
ASP, SQL	Lead a team of 3 to develop a web app for my Mensa chapter	2011
PHP, HTML, CSS	Supported a digital experiment to conduct behavioural economics research with teams from the University of Warwick and Mumbai	2011
Nmap	Audited my school LAN's security & assisted school authorities with patching buffer overflow vulnerabilities	2011
C#, Unity Framework	Software lead on a Game Design club I co-founded. Developed a 3D educational game for an NGO	2010
Java	Developed a student management program for the school counsellors	2010
Mindstorms NXT-G (LabVIEW)	Worked with a team of 3 for the Indian Robotics Olympiad. Primarily the software lead, but also helped and learnt about the structural engineering tasks and general coordination between members	2010

SKILLS

Languages: C#, Java, C/C++ (strong), SQL, Python, Haskell, ML (proficient), Prolog, MATLAB, JavaScript, CoffeeScript, HTML (basic)
Systems: Windows, Unix
Software: Visual Studio, Eclipse, git, OpenGL, Elasticsearch

TECHNICAL SKILLS

I usually work with Python (8 years) or C++ (5 years) using Linux, zsh, VIM & LaTeX, however in the past I have used a wide range of electronic design and programming tools:

Electronics	*Embedded Systems* PIC, Arduino, FPGA *Electronic Design*: VHDL, Verilog, SystemC SPICE, Modelsim, PCB layout
Programming	*Languages:* Perl, Ruby, Matlab, R, Java, Haskell *Databases:* Access, MySQL, PostgreSQL *Docs:* Beamer, Postscript, RST, Sphinx *Web:* Ajax, DOM, HTML, PHP, SQL, Rails, Django *OSs:* OpenBSD, Solaris, Mac *Version Control:* Git, Mercurial C++: Template programming, STL, Boost, DOxygen *Tools:* make, scons *Misc:* Networks, GPGU programming, XML, SVG

Technology Skills

OS	**Linux (primary)** and Windows
Programming	C++, Java, Python, Ruby, Assembly Language, C#, Eiffel, Oracle, SQL, HTML, CSS, JavaScript, AS3
Frameworks	**Robot Operating Systems (ROS)**, Ruby on Rails, Groovy on Grails, OSGi, ASP.net
Others	SSH, Shell, UI Design (futuristic minimalist), Java Swing, Java Servlet, JSP, Groovy, Web design, Web Development, Apache Felix, Apache Karaf, Maven, JPA, JSON, XML, Ajax, MVC, Git, SVN, Flash animation, UML, Agile development

Content - Work Experience

WORK EXPERIENCE

Goldman Sachs — **London, UK**
Summer Analyst, Securities Division — Jun – Aug 2013

- Interned at Divisional Strategies Group, the performance analytics sector for the Securities division
- Quantitatively analysed the performance and client relationship of current salespeople to identify opportunities for client refocusing using Slang, the firm's proprietary programming language
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Summer Intern, Cluster Management Team — Jul – Sep 2012

- Improved the Resource Weather search engine, an integrated resource management console of Google's resources
- Rewrote the existing C++ code base into Java and added new features
  - Introduced searching by additional parameters, enabling faster and more intuitive search experience
  - Developed a new data structure for keeping information about web views in Resource Weather
  - Improved the ranking algorithm that determines which search results should appear before others, based on the relevance of the result page to the user's query

J.P. Morgan — **London, UK**
Intern, Spring Week in Technology — Apr 2012

- Work-shadowed professionals and business leaders; actively attended networking sessions and workshops
- Participated in a team-based coding challenge
  - Studied various financial instruments, derivatives and their underlying assets
  - Designed a real time engine that could subscribe to the market feeds and calculate the implied volatility for options using the Black-Scholes model
    - Placed in the top 5 among all participants

WORK EXPERIENCE

Palantir Technologies – Forward Deployed Engineer – Summer 2013, 3 Months

- Implemented backend for typeahead functionality for the Palantir Phoenix database using Elasticsearch
- Designed and implemented APIs to expose this functionality to other Palantir systems
- Integrated typeahead with web frontend, using CoffeeScript, Handlebars and select2
- Worked on system for data import

[redacted] - CV – Work Experience ctd

EMPIC - Summer 2012, 2 Weeks

- Responsible for designing and implementing a prototype for a web service for PDF and web forms.
- When a user opens a form, it is will be partially filled out automatically by linking user data with existing databases. It can be completed and submitted using a browser.
- System was successfully implemented using Apache Tomcat, HTML/JavaScript websites and Java Servlets.

Fraunhofer FIRST Berlin – Student Assistant – Summer 2011, 6 Weeks

- Responsible for designing and implementing a complete face recognition system (face detection, face recognition, user database) and integrating it with Unity3D.
- Implemented accurate, real time face detection, by complementing the standard routines available in OpenCV.
- Tested a number of different approaches for face recognition and analysed their performance using both standard datasets and more realistic use case scenarios.
- Final face recognition system based on a combination of statistical methods including Kernel Principal Component Analysis and Linear Discriminant Analysis, all of which were implemented using C++/OpenCV.
- Implemented database module for storing user data using MySQL and C#.

Fraunhofer FIRST Berlin - Intern - Summer 2010, 4 Weeks

- Developed prototype for whole-body motion detection via webcam using C# and Emgu/OpenCV.
- Improved existing module for gesture recognition.

Content - Work Experience…tell me more…

Work Experience

2013	**Google**, Software Engineering Intern
	Wrote Java for Google Web Toolkit as part of the AdSense front-end team.
2008–2013	**Personal Computer Solutions**, Engineer
	Repaired hardware and software problems, reconditioned equipment, general retail.
2012	**Swogo**, Intern
	Worked as part of a startup team to improve data collection techniques and resources.
2009-2012	**Freelance Web Designer**
	Created websites for clients including high schools, photographers and landscape gardeners.
2009, 2010	**GMI**, Work experience
	Completed two summer work placements on the interactive teams at Global Market Insite.

WORK EXPERIENCE

GOOGLE INC. — **Summer 2012**

User Experience Intern

SKIN ANALYTICS — **2011-2012**

Usability Consultant & Application Developer

J. P. MORGAN CHASE & CO — **Summer 2009**

Summer Analyst (Technology – App-Dev. Graduate job offer)

Securitised Product Group (SPG). Risk management software development.

ALPHA KAPPA PSI — **2008 - 2010**

Web Developer

Developing a MySQL database with a PHP front end UI. Will be used in the next few months by more than 100 regular users.

Content - Work Experience…tell me more…

WORK EXPERIENCE

Cavendish Laboratory, University of Cambridge · October 1 2014. – present

- Doctoral Student

CERN – the European Organization for Nuclear Research · September 1 2014. – present

- Doctoral Student

Petnica Science Center, Serbia · August 7 2014 - present

- Professional associate and lecturer

CERN – the European Organization for Nuclear Research · July 1 2013. – June 30 2014.

- Technical Student

Microsoft Development Center Serbia · Mart 11 – June 30 2013.

- Data Science Associate

International German program, Munich, Germany · 19.06.2012 - 14.08.2012.

- Participant and DAAD scholarship holder

Content - Projects

Selected Personal Projects

2013 **Droppp.in** Ruby on Rails application using Google Maps API.

2012 **Degreees for Android** Ported Finely.co's Degreees.com web app to Android.

2011 **Project Euler** Solved a number of ProjectEuler.net problems, including number 306 on combinatorial game theory, on which I wrote an academic extended essay.

2010 **Detention System** Bespoke web-based system to manage detentions across my school using PHP and MySQL.

EXPERIENCES

- **Graduation Project,** Feb 2013 – Jun 2013**:** Integer Programming Formulations for Sales-force Routing and their application using real data from the company IDEA Technology Solutions.
- **Term Project,** Oct 2012 – Feb 2013: Accessibility Violations, which has the purpose of increasing the accessibility of the places for disabled people, by constructing web and mobile applications for violation checking and improvement.
- **Ericsson Turkey,** Jul 2012 – Sep 2012: Participation in an international software project in communication domain as service engineer intern in R&D department.
- **Microsoft Turkey,** Sep 2011 – Feb 2012**:** Microsoft Student Partner for Microsoft Turkey & Bogazici University. Developing WindowsPhone7 applications, which exist in the marketplace and being one of the writers of the book "WP7 Developing Applications".
- **Microsoft Summer School**, August 2011 – Sep 2011, Istanbul: Developing skills in Microsoft technologies such as MSSQL, Silverlight, Azure, XNA, Windows Phone7, SharePoint, creating a movie application and a game application.
- **Mercedes Benz Turk A.Ş.,** Jun 2011 – Jul 2011: Training in body & parts production department for optimization of processes.
- **Netiket Bilisim,** Aug 2010 – Sep 2010: Internship to construct the database of a hypothetical company, by writing a web application program to create the interface for managing the database.

PROJECTS

Cambridge Transport Hackathon, University of Cambridge Oct 2013

- Designed a journey planner app based on Google Maps API
- This app accepted places people want to visit in one day
- It automatically gave the optimal way in which order people should visit and how to get there

Olympic Tweets Classification, Final Year Project at QMUL Sep 2012 - Apr 2013

- Implemented Naive Bayes to classify Tweets into different Olympic hashtags

Car Parking System, Software Engineering Coursework Feb 2012 - May 2012

- Led, taught and allocated group members to complete the report and software
- Led a below-average group to earn an above-average grade

FTP Server May 2012

- Built a FTP server by C in Linux

Content – Projects…useful if work exp limited

Experience

Languages	**Java, C#, Lua, Verilog, Prolog, ML, C/C++.**
Final year project	**Independent project: Implementing pipelining in a simple processor** Designing advanced processor features and using Bluespec to sythesize it onto an FPGA
Second year Group project	**Cycle Path Mapping using .Net Gadgeteer.** Worked as part of a randomly selected team of five to create a product for our client. Interfaced between low level drivers and high level software to create a complete system.
Android App 2011	**RSS News Reader.** As part of a team of two created a simple (but high quality) android application to cache and display the latest BBC news.
Summer Work July 2008/9	**Oxford Computer Consultants;** created an automated tool to perform financial analysis. Returned several times to implement additional features. Assisted in developing website, as well as testing documentation Visual Studio processes.

EXPERIENCE

Individual Project 2013 –	**Third year student project: Implementing 3D graphics with soft vector processors** Using research-developed BlueVec to implement a rendering pipeline on FPGA
Work Experience 2013	**Frontier Developments plc** *Summer Intern (3 months)* • Participated in the development and maintenance of in-house 3D graphics engine • Implemented automated testing on Xbox One • Used professional version control and project management tools
Group Project 2013	**Second year student project: Cycle Path Mapping Using Microsoft .NET Gadgeteer** • Worked towards strict deadlines in a group of 5 randomly selected people • Ensured that the project was completed to the satisfaction of the client • Was responsible for organisation and deliverables, outlining interfaces, scheduling • Developed a variety of components including low level hardware, middleware and software
Teamwork	**Robinson College Football Club, Robinson College Boat Club** Requires co-operation and regular training to succeed in university league
Communication / Leadership 2011 –	**Voluntary Teaching in Hungary** Taught over 40 hours of English classes in secondary school with and without assistance Gave presentations in the school's English club Demonstrated basic algorithms and OOP design through Java in Programming classes

Awards

SCHOLARSHIPS AND AWARDS

2014	Scholar of **Google Anita Borg Memorial Scholarship** Europe, Middle East and Africa for having demonstrated outstanding academic achievement, leadership and community involvement
2013	Scholar of **Dositeja scholarship** for the best students in senior years of study in Serbia, given by Ministry of Education, the Republic of Serbia
2012	Holder of **DAAD scholarship** for summer school in Germany
2012	Praise for outstanding achievement in the first and the second year of undergraduate studies given by Faculty of Mechanical Engineering, University of Belgrade, Serbia
2011	Holder of **Belgrade City scholarship** for the extraordinary students of Belgrade University
2011	Honorable Mention at the **International Competition in Research Projects in Physics: First Step to Nobel prize** for work on optical waveguide design
2010	Full scholarship holder for attending the Faculty of Computing

1

ACHIEVEMENTS

2014 University of Cambridge Computer Science Year 2: Award for best technical group project "Exploiting the Raspberry Pi's GPU for general purpose computation"

2012 St Dominic's Sixth Form: Achievement Award for Top Achiever in Further Maths

2012 St Dominic's Sixth Form: Wings of Hope Achievement Award (for raising money for charity)

2011 St Dominic's Sixth Form: Finalist in the National Science and Engineering Competition

2010 Harrow High School: Certificates for Achievement, Effort and Progress in Maths, Science, Geography, DiDA

Activities / Interests / Extracurricular

Activities/Skills

Team sailing, International Champions; crew to the captain of the first team. Sailed weekly in a team of six for two years. Gained excellent teamwork skills both inside the boat and between boats. Ended up placing first in the British International Schools Championship in 2011.

Combined Cadet Force; participated in the school's cadet force for several years. Was responsible for organising activities for and ensuring well-being of groups of younger members. Reached final rank of Cadet Sergeant.

Robotic Visions, Halls of Parliament; Went to the Halls of Parliament to present our views on the future of Robotics in the UK to MPs after a successful presentation at a local event.

Languages: Native English speaker, advanced Dutch.

Interests: Sailing, Video games (and modding).

SKILLS, ACTIVITIES & INTERESTS

Languages: Native in Korean; Moderate Proficiency in Japanese
Technical Skills: Java, C, C++, SQL, VBA, ML, Prolog, UNIX, MATLAB, LaTeX and Slang
Activities: Student Ambassador at Google, Member of Association for Computing Machinery
Interests: Long distance cycling, Beatboxing, Swimming, Classical guitar
Honors: 1st Place in 2009 International Robot Olympiad, 2nd Place in 2010 World Robofest in Mi

ACHIEVEMENTS

- Extensive knowledge of the Java programming language.
- Good knowledge of the Android platform.
- Knowledge of C++, C#, Visual Basic, C, PHP, HTML, CSS, JavaScript, SQL, XML.
- Good grounding with Linux – Fedora and Ubuntu distributions.
- Won 'Best Project Idea', 'Best Project Plan' and 'Best Visual Appeal' awards for our group university project – competing with over twenty other groups.
- Grades 1-4 Piano.
- West Yorkshire Fire & Rescue Service Fire Safety Course to a bronze duke of Edinburgh award standard – community service.
- Sixth form IT representative for Bradford Grammar School at UK IBM Chairman meeting.
- Set up a day charity event for MENCAP raising over £250.
- Won 'Pledge of the Year' award in the UK Chapter of Alpha Kappa Psi.

EXTRA CURRICULAR

- Piano – 9 years, Guitar – 6 years.
- Rowing - Girton College, Cambridge
- Music Production – 3 years
- Creating and maintaining websites
- Playing tennis and golf
- Swimming and Skiing
- Snowboarding
- Running – Four 10Ks and a half-marathon so far!
- Active member of Alpha Kappa Psi Business Fraternity

Social Interests.

I have always had a strong love of technology and spend much of my spare time reading and expanding my knowledge. Aside from this, I am a very large sports fan and engage a myriad of different games and activities. Academically, I am currently studying part-time for an additional A-level in Economics due to my interest in the subject and wish to further improve my understanding of the clients I support. Additionally, I am beginning work upon an ambitious Android application based upon a social networking quiz concept. Importantly, I also enjoy music and travelling, having partaken in tours of China and Egypt in the past.

Common questions, omissions and silly mistakes

How many pages?	1-2
Use a photo?	NO
Date of birth?	Not needed
Nationality?	Not necessarily
Bullets or paragraphs?	Bullets are better
Use the word “I”?	NO
Use adjectives?	Sparingly if at all
Use verbs?	YES
Full referees details?	NO

Skills often forgotten:
-Requirements gathering
-Project management
-Quality/testing
-Documentation
-Agile development

Silly mistakes:
-Don’t name file CV.doc
-Don’t write to the wrong firm
-Don’t bend the truth

CV checklist

Design

- ✓ Good navigation?
- ✓ Clear blocks?
- ✓ Good use of the ‘green zone’?
- ✓ Is it inviting and easy to read?
- ✓ Is the eye drawn to the most important content?

Content

- ✓ More than just a transcript?
- ✓ Do the tech skills stand out?
- ✓ Obvious what you have done and how?
- ✓ Good use of vocabulary?

The CV checklist – 3 things to get right

- ✓ Content
- ✓ Clarity
- ✓ Job Match

Job Match

- Sculpt your CV to match the role you're targetting
- How?
    - Mirror the language they use in job ads
    - Rejig your sections
    - Use different headings
    - Reorder your bullets

Job Match example

Associate Product Manager, University Graduate

Mountain View, CA, USA · New York, NY, USA · Seattle, WA, USA · Kirkland, WA, USA

Product Management · Full-time

Know someone who would be interested?

APPLY NOW | Find connections | Sign in to see your connections at Google

At Google, we put our users first. From innovative software products like Gmail, YouTube, Chrome, StreetView to pioneering mobile devices like the Android, we build products that organize the world's information and make it universally accessible to our users. The Product Management team works closely with our engineers to guide products from conception to launch, and with our business partners to generate profitable revenue streams. As part of the Product Management team, you bridge technical and business worlds as you design technologies with creative and prolific engineers and then zoom out to lead matrix teams such as Sales, Marketing and Finance, to name a few. You have a bias for action and can break down complex problems into steps that drive product development at Google speed. As a Product Manager, you can be part of shaping Google's next game-changer.

Responsibilities

- Understand and analyze user needs.
- Help to define a product vision and strategy.
- Work with world-class engineers to build and launch new features.

Minimum qualifications

- BA/BS or MA/MS in Computer Science.

Preferred qualifications

- Strong technical abilities.
- Demonstrated capacity for developing and understanding strategy.
- Excellent written and oral communication skills.
- Deep interest in creating and analyzing products.
- Strong organizational and analytical skills.

Don't just start with requirements

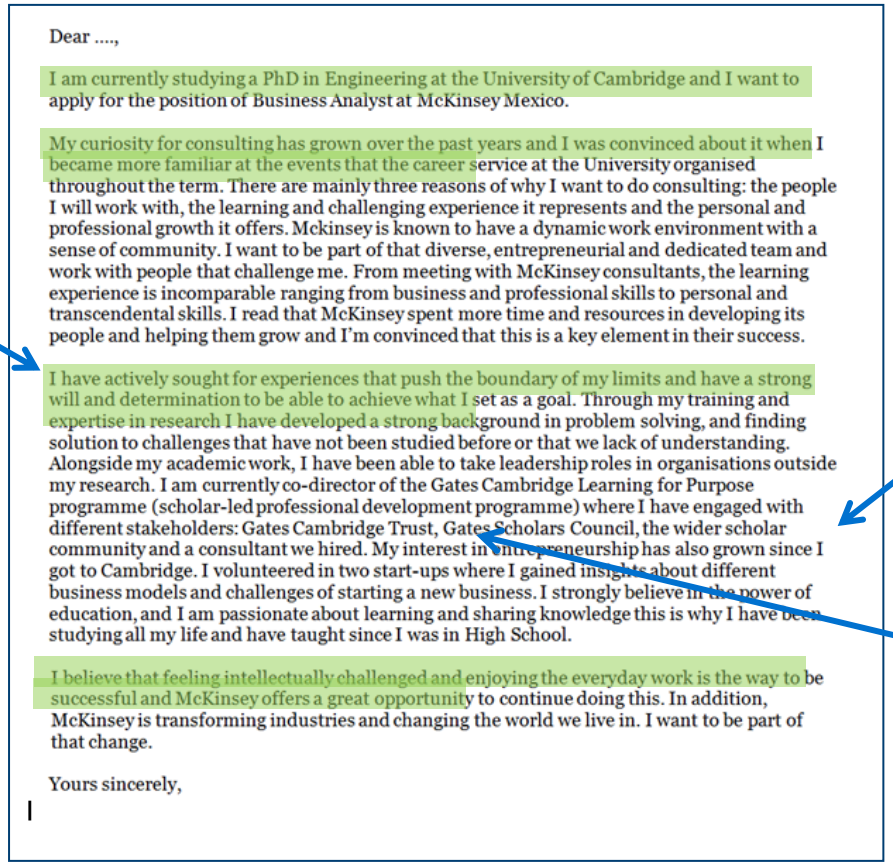
Understand what the role involves

What evidence do you have?

Build your CV/CL around this

Cover letter scan reading basics

Where the eye goes



Dear ....,

I am currently studying a PhD in Engineering at the University of Cambridge and I want to apply for the position of Business Analyst at McKinsey Mexico.

My curiosity for consulting has grown over the past years and I was convinced about it when I became more familiar at the events that the career service at the University organised throughout the term. There are mainly three reasons of why I want to do consulting: the people I will work with, the learning and challenging experience it represents and the personal and professional growth it offers. Mckinsey is known to have a dynamic work environment with a sense of community. I want to be part of that diverse, entrepreneurial and dedicated team and work with people that challenge me. From meeting with McKinsey consultants, the learning experience is incomparable ranging from business and professional skills to personal and transcendental skills. I read that McKinsey spent more time and resources in developing its people and helping them grow and I'm convinced that this is a key element in their success.

I have actively sought for experiences that push the boundary of my limits and have a strong will and determination to be able to achieve what I set as a goal. Through my training and expertise in research I have developed a strong background in problem solving, and finding solution to challenges that have not been studied before or that we lack of understanding. Alongside my academic work, I have been able to take leadership roles in organisations outside my research. I am currently co-director of the Gates Cambridge Learning for Purpose programme (scholar-led professional development programme) where I have engaged with different stakeholders: Gates Cambridge Trust, Gates Scholars Council, the wider scholar community and a consultant we hired. My interest in entrepreneurship has also grown since I got to Cambridge. I volunteered in two start-ups where I gained insights about different business models and challenges of starting a new business. I strongly believe in the power of education, and I am passionate about learning and sharing knowledge this is why I have been studying all my life and have taught since I was in High School.

I believe that feeling intellectually challenged and enjoying the everyday work is the way to be successful and McKinsey offers a great opportunity to continue doing this. In addition, McKinsey is transforming industries and changing the world we live in. I want to be part of that change.

Yours sincerely,

Think about paragraph length

Determine what jumps out of the text

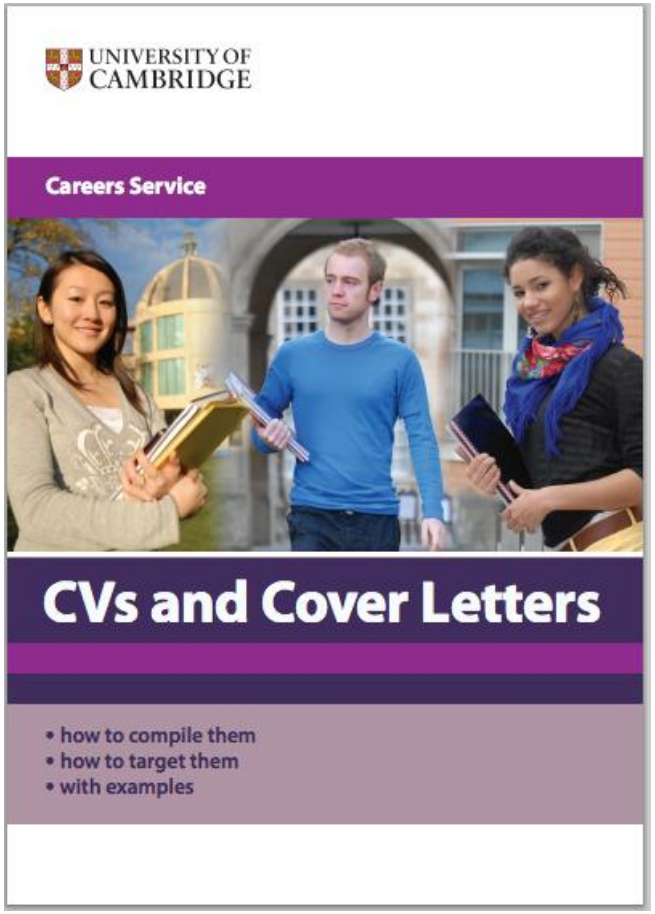
Plan your cover letter before you start writing!

Shaping your cover letter

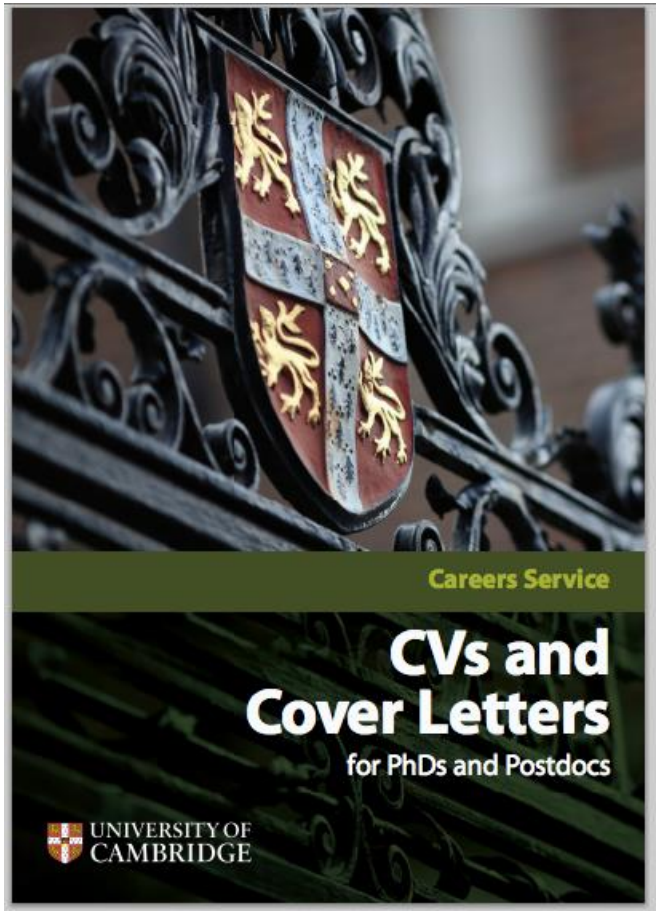
- Not a repeat of your CV in narrative form
- 1 page only
- Paragraphs in readable chunks (8-10 lines max)
- Open with who are you and what are you applying for
- Express your motivation for the role / company / sector
- Highlight a few key things that show you match the job
- Does it reflect THEIR job?
- Get a native speaker to sanity check

Download one of our CV Books – advice & examples

http://www.careers.cam.ac.uk/library/Cvbook/index.asp



For Undergraduates and MPhils



For PhDs and Postdocs

The Careers Service www.careers.cam.ac.uk