

# CURRICULUM VITAE (CV)

A curriculum vitae (CV) is a summary of your educational history, academic achievements, and work experiences that will accompany your application for employment. The primary differences between a CV and a traditional resume are length and additional content. A CV is typically longer than a resume and often includes information about your teaching and/or research experiences, publications, presentations, honors/awards, professional affiliations, etc. A CV is used primarily by people who are pursuing careers in research or academia and applying for fellowships or further education, whereas resumes are typically more appropriate options for people pursuing careers in industry.

## How to Begin

Take some time before you put together your CV to brainstorm the most important points you want to convey, including what activities, roles, or types of experiences you want to accentuate. Your section headings and descriptions should reflect those key points.

## Length

A CV will be longer than a traditional job-seeking resume, but length does not determine quality. A CV for a recent graduate may be only 2 to 3 pages long, while an experienced professional may have a much longer document.

## CVs for Different Purposes

A CV may be required for a variety of purposes, and you should tailor your CV at each step of the way. A CV is a living document, so you should continually update as your experience increases.

## Graduate School Admission

For graduate school admission, your CV will likely be structured more like a resume. It should highlight information that would not be captured on your application, such as significant undergraduate

accomplishments, student groups, relevant coursework, and work experience in your desired field.

## Graduate Assistantships and Funding

Your CV should highlight your experience and skills in the areas that are relevant to the assistantship. For example, if the assistantship involves research, technology, or teaching, your CV should include information about your experience and skills related to those areas. These awards are highly competitive, and you need to make sure your CV stands out among the other applicants.

## Research Opportunities

Add categories like “Research Experience” to accentuate your background in the field you want to study. In this case, some of the experiences listed as “Projects” on your traditional resume may be labeled as “Research” on your CV.

## Dissertation Review/Defense

Include “PhD Candidate” in the Education section to convey that you are in the final stages of your program. Include references to significant coursework, supervised research projects, presentations (on campus and off), research, and teaching experience.



## Employment

First and foremost, a CV for employment purposes must be up-to-date with all of your most recent experiences and accomplishments and should not contain any errors. Research the responsibilities and requirements of the position to which you are applying and be sure to construct your CV as to show off your experiences and skills that relate.

## CV Content

### Name and Contact Information

As with a resume, your name should be prominent, centered, and in bold to stand out. You may also want to use a slightly larger font size than you are using in the rest of the CV. When listing your address and phone number, choose the postal address that is most accessible for you to receive mail and the direct phone number at which you are least likely to miss calls. You should not use a university department address on your CV unless you are employed by that school as a professor or researcher. Your email address should be professional and not necessarily associated with your current employer, particularly if you are looking for an academic job at another institution. If you have a professional website or portfolio, you may choose to include a link to that page; you can also include a URL for your LinkedIn profile.

### Objective

An objective is a concise, direct statement of what you hope to do and is especially helpful when your goals are different from your current career background.

### Education

This section should include your degree(s) and institution(s), as well as expected graduation dates (month and year), dissertation/thesis topics, and

possibly your focus area(s). If you attended WPI as an undergraduate, you may put your MQP title beneath your Bachelor's degree. Your degree should be bolded. If you attended a prestigious university, that should be bolded as well. If you are in a PhD program, "PhD Candidate" would be used for a degree name to indicate you have passed your candidacy/qualifying exam but have not yet defended your dissertation. You will only change it to "PhD" once you have earned your degree. If you have multiple degrees, list them in reverse-chronological order with most recent degree first.

You may choose to list academic honors, such as cum laude, summa cum laude, or magna cum laude, within your Education section. Other academic honors should be included in a separate Honors or Awards section. This section may be titled *Education, Academic Background, Educational Overview, Professional Studies, etc.*

### Teaching, Research, and/or Clinical Experiences

Your experiences section heading(s) should reflect the key functions of the position to which you are applying. If you are applying to a faculty position that emphasizes both teaching and research, you might have a "Teaching Experience" as well as a "Research Experience" section. If clinical experience is important to the role you are seeking, include a "Clinical Experience" section and be sure to mention client or subject population. Be sure to provide sufficient information about what you did, what you achieved, and your methodology. Be sure each Experience section is in reverse-chronological order.

Depending on the experiences you have, you may have multiple sections that are appropriate, including titles such as: *Teaching Experience, Research Experience, Clinical Experience, Fellowships, Research Grants, Graduate Fieldwork, or Sponsored Research.*

## Publications, Presentations, and Patents

All publications, presentations, and patents should be included on your CV, in separate sections. Be sure to use proper citation. Preferred bibliographic styles may differ by discipline or field.

Different section titles that may be appropriate depending on what you have done include: *Presentations, Publications, Patents, Publications in Progress, Papers Presented, Poster Sessions, Reviews, Scientific Papers, Books, Chapters, Lectures, Conferences, or Workshop Presentations.*

## Activities or Service Experience

You may list experiences outside of your academic/ research experiences, such as volunteer experiences, consulting activities, non-academic experiences, student recruitment, non-academic related public speaking engagements, and other examples of community involvement and engagement. Although they may not all be related to academics or your chosen field, they are enriching experiences that reveal more about you to the person reviewing your CV.

This section can be called a variety of titles, such as: *Service, Campus Activities, Committee Leadership, Community Outreach, Interdisciplinary Collaboration, Departmental Service, or Professional Activities.*

## Professional Affiliations

You might choose to list the organizations or professional associations of which you are a member. If you have had, or currently have, a leadership role in any of those organizations, be sure to highlight that by listing the role first and bolding it.

Section titles for this section could include: *Professional Organizations, Affiliations, Memberships, or Scholarly Societies.*

## Skills

Sometimes a section highlighting your technical skills may be useful. For example, if the position you are seeking requires a great deal of experience with particular laboratory techniques, software, or foreign languages, you might highlight those in a Skills section.

This section may be called: *Skills, Competencies, Proficiencies, etc.*

## References

References are not necessary to list on your CV but you should be prepared to provide them upon request. Be sure to ask permission to use someone as a reference in advance and provide them with a copy of your CV. An exception to this may be for individuals applying for faculty positions, in which case a list of references can be included at the end of your CV.

## Additional Categories

There is no “one size fits all” prescription for what categories and details should be included in a CV. Depending on the purpose or position for which you are applying, additional sections may be appropriate that highlight necessary competencies or components of the role that do not fit elsewhere. For example, if a position requires you to teach or conduct research abroad, an “International Experience” section could be appropriate, but it would not be relevant to positions that do not have that component. Your CV is entirely customizable to what works for you and demonstrates the skills and experiences that will make the person reviewing it want to invite you for an interview!

## Sample CV 1

### Jane Doe

10 Main Street, Apt. # 2D • Anytown, NH, 03745 • (603) 000-0000 • jdoe@wpi.edu

#### OBJECTIVE:

Research intensive faculty position in Chemistry at X University

#### RESEARCH INTERESTS:

Genetics, Gene Therapy, RNA, DNA

#### EDUCATION

**Worcester Polytechnic Institute (WPI)**, Worcester, MA

**Postdoctoral Fellow**, Department of Chemical Engineering, August 2013 - Present  
"Encapsulation of RNA into polymer nanospheres for delivery to human cells"

**Massachusetts Institute of Technology (MIT)**, Cambridge, MA

**Doctor of Philosophy in Chemistry**, May 2013

Thesis: "Sequence-Specific Recognition of DNA in the minor Groove"

**Rensselaer Polytechnic Institute (RPI)**, Troy, NY

**Bachelor of Science in Chemistry**, May 2007

Independent Research: "Synthesis of Imidazole-Containing and Amidine-Linked Analogs of Distamycin."

#### AWARDS

**Gamma Sigma Epsilon (Chemistry Honor Society)**, WPI, August 2013 – Present

**National Institute of Health Postdoctoral Fellowship**, June 2013

**Company ABC Fellowship**, August 2006-May 2008

**Merit Scholarship**, RPI, May 2004

#### RESEARCH EXPERIENCE

**Postdoctoral Researcher**, Chemical Engineering Department, WPI, August 2013 – Present

Advisor: Professor A

Create experiment to assess ribonucleic acid (RNA) encapsulation for implementation in gene therapy. Assess chemical derivation of the polymer/RNA nanosphere for targeting specific cell types independently. Apply polymer synthesis and characterization, GPC, and Cellular targeting.

**Research Assistant**, Chemistry Department, MIT, August 2008 – May 2013

Advisor: Professor B

Researched pattern of double-helical DNA-binding properties by applying gel electrophoresis. Developed specifications for design of future sequence-specific DNA-binding polyamides. Used techniques such as synthesis, NMR spectroscopy in research.



## Sample CV 1

Jane Doe (page 2 of 3)

**Summer Research Assistant**, Chemistry Department, RPI, June – August 2007

Advisor: Professor C

Applied chemistry with amidine linkages and end groups for electrostatic interaction with DNA in synthesis. Conducted in-depth literature review to understand previous research resulting in report to propose new study for future research foundation.

**TEACHING EXPERIENCE**

**Teaching Assistant**, Organic Chemistry, WPI, September 2002 – June 2013

Helped write problem sets and exams for Organic Chemistry class. Assisted students individually with homework problems or material they found difficult to understand.

**Teaching Assistant**, Introduction to Chemistry, MIT, August 2012 – May 2013

Prepared teaching materials including problem sets and exams for Introduction to Chemistry courses. Supervised two other undergraduate teaching assistants and graders. Addressed individual student questions and needs.

**Teaching Assistant**, Organic Chemistry Lab, MIT, August 2011 – May 2012

Supervised and instructed students in organic chemistry techniques in Organic Chemistry Laboratories. Emphasized keeping complete and accurate scientific notes.

**Teaching Assistant**, Organic and Inorganic Chemistry Lab, RPI, January – May 2008

Prepared teaching materials for Laboratory Techniques in Organic and Inorganic Chemistry courses. Supervised and assisted students with multi-step syntheses of compounds designed to teach general laboratory techniques.

**PRESENTATIONS**

J. Doe, E.E. Cummings, and J.J. Reynolds, "Recognition of 5'-(A,T)GG(A,T)2-3' Sequences in the Minor Groove Of DNA by hairpin Polyamines." *Journal of the American Chemical Society*, 2013, 5, 118, 1047.

J. Doe, A.L. Brown and M. Kinney. "Synthesis and DNA Binding Studies of Imidazole-Containing and Amidine-Linked Analogues of Distamycin A." Fifth National Conferencing on Undergraduate Research in Pasadena, CA. April 2008.

**PUBLICATIONS**

J. Doe, B.B. Cummings, and J.J. Reynolds, "Optimization of the Hairpin Polymide Design for Recognition of the Minor Groove of DNA." *Journal of the American Chemical Society*, 2013, 5, 118, 1047.

J. Doe, J.J. Reynolds, "Recognition of 5'—(A,T) GG (A,T) 2-3' Sequences in the Minor Groove of DNA by Hairpin Polyamides." *Bioorganic Medical Chemistry*, 2013, 118, 6153.



## Sample CV 1

Jane Doe (page 3 of 3)

J. Doe, J.J. Reynolds, "Simultaneous Binding of the Polyamide Dimers and Oligonucleotides in the Minor and Major Grooves of DNA." *Bioorganic Medical Chemistry*, 2013, 5, 1045.

L. Lyne, J. Doe, J.J. Reynolds, "Cyclic Polyamides for Recognition in the Minor Groove of DNA." *Proceedings of the National Academy of Sciences, USA*, 2012, 93, 10389.

### ACTIVITIES

**Officer/Member**, Association of Postdoctoral Women, WPI, August 2013 – Present

**Member**, American Chemical Society, August 2006 – Present

**Volunteer**, Memorial Hospital Extended Care, Cambridge, MA, August 2011 – May 2013

**Coordinator**, Organic Chemistry Seminar Series, MIT, August 2011 – May 2012

**Member**, Marching and Symphonic Bands, RPI, August 2004 – May 2008

### REFERENCES

**Professor Derek Jeter**, Chair, Chemistry Department, MIT

(617) 000-0000

djeter@mit.edu

Research Assistantship Advisor

**Professor David Ortiz**, Chemistry Department, MIT

(617) 000-0000

dortiz@mit.edu

Professor for three years

**Professor Sammy Sosa**, Chemistry Department, RPI

(555) 000-0000

ssosa@rpi.edu

Professor and advisor for four years



# CURRICULUM VITAE (CV)

## Sample CV 2

### Angela Apple

777 Lucky Way  
Worcester, MA 01609

508-777-7777  
aapple@wpi.edu

#### OBJECTIVE

Postdoctoral fellowship focused in fluid mechanics

#### EDUCATION

**Doctor of Philosophy Candidate, Mechanical Engineering**, GPA 3.7/4.0      Expected May 2016  
Worcester Polytechnic Institute (WPI), Worcester, MA  
Dissertation: "Project Planning and Control in a Shipbuilding Yard"

**Master of Science, Mechanical Engineering**, GPA 3.9/4.0      May 2012

**Bachelor of Mechanical Engineering**, GPA 3.7/4.0      May 2009

Columbia University, New York, NY

Master's Thesis: "Plasma Synthesis of Crystalline Silicon Nanoparticles"

#### RESEARCH EXPERIENCE

**Research Assistant**, Mechanical Engineering Department, WPI      Aug 2012-Present

- Analyze filtration on fractal aggregates to best understand process
- Applied for and secured National Science Foundation (NSF) Research Grant to apply towards nanoparticle research
- Collaborate with ABC Company, DEF Corporation, and team of seven students to study fiber filters to advanced manufacturability
- Develop and maintain a web-based software to log, and analyze, product performance

**Research Assistant**, Engineering Department, Columbia University      Aug 2011-May 2012

- Optimized plasma reactor to synthesize nanoparticles for electronic device applications
- Examined and categorized nanoparticles on electron and atomic force microscopes
- Maintained equipment such as vacuum, spectrometer, and laser light for experiments
- Performed experiments under varying plasma conditions independently
- Wrote weekly memos and monthly status reports highlighting progress and limitations

#### TEACHING EXPERIENCE

**Teaching Assistant**, Particle Engineering Course, Columbia University      Jan 2011-May 2011

- Led office hours to help students understand and solve homework problems
- Created and evaluated student homework assignments
- Generated, graded and tracked weekly assessments, using Microsoft Word and Excel

#### PATENTS

**Incorporated input roller having a rotary mass actuator** (pending)      Filed: Feb 2012

**Handheld device having multiple localized force feedback** (pending)      Filed: April 2012

**Tag for enabling contact with a wireless communication device** (# 12345)      April 2012

#### AWARDS & FUNDING

**Massachusetts Society of Engineers Graduate Student Scholarship**      Aug 2008-Present

**National Science Foundation Graduate Research Fellowship, NSF**      April 2012



## Sample CV 2

**Angela Apple**  
(Page 2 of 2)

**Mechanical Engineering Advanced Study Grant, Columbia University** Aug 2010-May 2011

### **PUBLICATIONS**

#### **Journal Publications**

**Angela Apple**, Peter Pear, Olivia Orange. Journal article title. International Journal of Mechanical Engineering, 2013; Under review.

**Angela Apple**, Barbara Banana, Ginny Grape. Journal article title. International Journal of Mechanical Engineering, 2012; 126 (56-70): 1020-1056.

**Angela Apple**, Walter Watermelon, Marge Mango. Journal article title. International Journal of Mechanical Engineering, 2010; 122 (43-52): 894-906.

#### **Conference Publications**

Peter Pear, **Angela Apple**, Olivia Orange. Title. Conference, Conference City, State, May 2011

Ginny Grape, **Angela Apple**. Title. Conference, Conference City, State, Sept 2010

### **PRESENTATIONS**

#### **Numerical Study of Natural Convection in Solar Thermal Storage Vessels**

Massachusetts Society of Engineers Conference 2011, Concord, MA Sept 18-21, 2012

#### **Numerical Study of Natural Convection in Solar Thermal Storage Vessels**

American Society of Mechanical Engineers Conference 2011, Boston, MA June 4-7, 2012

#### **Real-Time Automotive Slip Angle Estimation with Nonlinear Observer**

American Control Conference 2011, Auburn, AL, Jan 12-15, 2013

#### **Low Pressure Plasma Synthesis of Crystalline Silicon Nanoparticles**

University of Minnesota Master Thesis Event 2007, Minnesota, MN, May 2, 2012

### **POSTERS**

#### **Low Pressure Plasma Synthesis of Crystalline Silicon Nanoparticles**

Massachusetts Society of Engineers Conference 2012, Boston, MA, Sept 20-24, 2012

### **PROFESSIONAL MEMBERSHIPS**

**International Association of Mechanical Engineers**

Aug 2011-Present

**American Society of Mechanical Engineers**

Aug 2010-Present

**Massachusetts Society of Professional Engineers**

Aug 2009-Present

### **SERVICE**

**Professional Reviewer**, University Council of Graduate Student Grants

Aug 2010-Dec 2010

**Volunteer**, Annual Blood Drive-American Red Cross, New York, NY

May 2008, 2009, 2010

**AmeriCorps Volunteer**, MN Math Corps, New York, NY

June 2009-July 2008



## Sample CV 3

### Student Studentberg

1234 Student Street  
Worcester, MA 01609  
sstudentberg@wpi.edu  
(508) 123-4567

#### OBJECTIVE

Summer research in robotics engineering

#### RESEARCH INTERESTS

Autonomous navigation and manipulation, assistive robotics, artificial intelligence, human-robot interaction

#### EDUCATION

**Worcester Polytechnic Institute (WPI)**, Worcester, MA

**Doctor of Philosophy (PhD) Candidate in Robotics Engineering**, GPA 3.83/4.00, Expected May 2018

**Rose-Hulman Institute of Technology (Rose-Hulman)**, Terra Haute, IN

**Bachelor of Science (BS) in Mechanical Engineering**, GPA 3.72/4.00, May 2013

#### RESEARCH EXPERIENCE

**Research Assistant**, Robotics Department, WPI, August 2014-Present

Advisor: Professor A

- Collaborated with two post docs and professor in the Engineering Lab A
- Integrated robotics sensors (stereoscopic camera, LIDAR, GPS, and encoder) on small scale off-road car
- Collected and analyzed data of sensors from Robot Operating System (ROS)

**Rose-Hulman Robotics Study Team**, Rose-Hulman, Jan 2011-May 2013

Advisor: Professor B

- Designed gripping/grabbing mechanism for robotic vehicle for Assistive Robotics Competition in 2011
- Led team of six over course of two years to develop firefighting capabilities of robot
- Assembled electrical circuit/controller board for a robot programmed to fight fires
- Drafted detailed schematics of robot using SolidWorks
- Installed a CMOS camera module on a humanoid robot
- Designed and fabricated a body cover for Intelligence Ground Vehicle which competed in the Intelligent Ground Vehicle Competition (IGVC) in 2012 and 2013 resulting in honorable mention

**Research Assistant**, Engineering Department, Trinity College, May 2012-May 2013

Advisor: Professor C

- Chemically synthesized super-hydrophobic surfaces on metal pipes
- Improved previous experimental setup to measure drag reduction more efficiently
- Conducted experimental tests to measure drag for various flow ranges
- Utilized particle image velocimetry and pressure drop measurements to observe factors corresponding to drag reductions in various applications

**Research Assistant**, Mathematics Department, University of Connecticut, Storrs, CT, June 2012-Aug 2012

Advisor: Professor D

- Analyzed spore scattering through reviewing spore images under digital microscope
- Used MATLAB to quantify spores on each image, reporting weekly to professor with Excel charts
- Analyzed spore fluid mechanics using mathematical modeling, measurements, and statistical analyses
- Presented research findings in group of four researchers at the Annual Meeting of the American Physical Society (APS) Division of Fluid Dynamics



## Sample CV 3

Student Studenberg (page 2 of 2)

### PROJECT EXPERIENCE

**Advanced Dynamics: Stress Reduction System**, Rose-Hulman, September 2011-May 2012

Advisor: Professor E

- Created an actuator to reduce stress on a beam through a feedback control system independently
- Designed and built a controllable crank to reduce system stress
- Measured stress reduction and analyzed data to determine necessary changes to system
- Presented system performance and results at the Annual Science Symposium

### TEACHING EXPERIENCE

**Teaching Assistant**, Robotics Engineering Department, WPI, Aug 2014-Present

- Co-taught undergraduate lab sessions for Introduction to Robotics and Unified Robotics I courses
- Graded homework and conducted tutoring sessions

**Teaching Assistant**, Engineering Department, Rose-Hulman, Jan 2012-May 2013

- Co-taught undergraduate lab sessions of Engineering Materials and Materials Processing courses and prepared and maintained all laboratory equipment for experimental procedures
- Held office hour help sessions for Materials Processing course

**Mathematics Tutor**, Mathematics Department, Rose-Hulman, Sept 2010-May 2013

- Provided assistance and tutoring sessions for undergraduate students needing assistance with Calculus and Algebra coursework

### PRESENTATIONS

“Fluid Mechanics of Spores,” **Annual Meeting of American Physical Society (APS) Division of Fluid Dynamics**, Terra Haute, IN, Aug 2012

“Stress Reduction System,” **Annual Science Symposium**, Rose-Hulman, Terra Haute, IN, April 2012

### SKILLS

**Programming Languages:** MATLAB, C/C++, LabVIEW

**Software:** SolidWorks, ROS (Robot Operating System), COMSOL

**Hardware:** Manual Machining, Soldering, CNC

### HONORS

**Rho Beta Epsilon** (Robotics Engineering Honor Society), WPI, Jan 2014-Present

**Shelby Davis UWC Scholarship**, Davis United World College Scholars, August 2009-May 2013

**Faculty Honors (Mechanical Engineering Award)**, Rose-Hulman, August 2010-May 2013

**Pi Mu Epsilon – National Mathematics Honor Society**, Rose-Hulman, Jan 2012-May 2013

### ACTIVITIES

**American Society of Mechanical Engineers (ASME)**, Rose-Hulman/WPI, February 2012-Present

**Graduate Student Government**, WPI, Sept 2014-Present

**Engineers Without Borders**, Rose-Hulman, November 2011-May 2013

