**Albert Einstein**

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Your Name

Your mailing address, phone number, e-mail address

Education (example)

***Case Western Reserve University****, Cleveland, OH*

B.S. in Physics, expected *May 2020*

*GPA: 3.25, Major GPA: 3.65*

*Physics Subject GRE: 720*

EDUCATION (instructions)

* + University name and address
  + Degree(s) (B.S., B.A. in Physics or Math and Physics)
  + GPA, Major GPA
  + Optional: Concentration (biophysics, etc.)
  + Optional: Secondary major, minor
  + pGRE – normalized score and/or percentile

Objective

I seek a patent office position in which i can contribute to society utilizing the experience summarized in this resume.

OBJECTIVE

I want to be work in field Z because … (or style of your own choosing)

Research experience

Magneto-optical microscopy:

* Constructed custom magneto-optical Kerr microscope
* Wrote software in LabView for microscope image acquisition
* Prepared samples and collected data

Micromagnetic simulation:

* Developed code to include spin-orbit effects in micromagnetic simulation
* Simulated magnetic nanostruectures on high-performance computing cluster
* Analyzed results in Matlab
* Created data visualizations of results in Paraview

Special and general relativity:

* Postulated equivalence of inertial reference frames and constancy of speed of light
* Concluded that space and time are relative to one’s reference frame
* Described gravity as curvature of space-time

RESEARCH EXPERIENCE

* + Descriptions of research itself
  + Break down experience in laboratory and computational courses
  + The break down should include general reference to instruments, data collection and analysis, simulations, concepts, commercial and individual programming. Detailed items are placed in SKILLS section below.

Professional experience

***REU: University of Michigan****, Ann Arbor, MI, Summer 2019*

* Performed optics experiments in the lab of Prof. Michael Faraday
* Studied unconventional switching behavior in spin-torque oscillators using magneto-optical microscopy.
* Co-authored a publication for Physical Review B.

***CWRU research assistant****, Cleveland, OH, 2017-2018*

* Conducted micromagnetic simulations in the Berezovsky research group in the CWRU physics department.
* Characterized the effect of spin-orbit interaction on magnetization dynamics in superparamagnetic nanoparticles.
* Designed a poster to communicate results.

***CWRU physics department office assistant****, Cleveland, OH, 2018-2019*

* Designed and posted notices of upcoming department events.
* Coordinated collection of faculty publications for department website.
* Organized course materials for large introductory physics courses.

PROFESSIONAL EXPERIENCE (OTHER WORK EXPERIENCE)

* + List including address and years
  + If possible: REUs, SOURCE, internships, coops
  + Preferably specific example(s) of research work with adviser(s)
  + Summer jobs, work/study, high school jobs and volunteer work, not necessarily related to physics
  + Use lead-in words like: designed, developed, led, identified, simulated, calibrated, constructed, …

Teaching experience

***Case Western Reserve University****, Cleveland, OH*

Physics Department Teaching Assistant, 2017-present

* Graded weekly homework for introductory physics courses.

Teaching Experience

* + Flesh out some details on SI, tutor, grader and/or other including pre-college*.*

Presentations and publications

**Peer reviewed publication:** “On the electrodynamics of moving bodies,” **A. Einstein**, Annalen der Physik, (submitted).

**Peer reviewed publication:** “The role of spin-orbit interaction in spin-torque switching,” A. Gradstudent, B. Gradstudent, **A. Einstein**, A. Professor, Physical Review B, **96** (2018).

**Poster:** Research Showcase, CWRU, Spring 2018

“Including spin-orbit interactions in micromagnetic simulation,” **A. Einstein.**

**Oral presentation:** American Physical Society meeting, Ohio Chapter

“Spin torque switching in the regime of large spin-orbit interaction,” **A. Einstein**, A. Professor

PRESENTATIONS AND PUBLICATIONS

* + Include, if you have any, otherwise omit this category
  + These can be abstracts or other submissions to conferences
  + “title”, ‘authors’ and the venue, as in Research Showcase or SOURCE Intersections at CWRU
  + Submissions that are not yet accepted are okay for publications and presentations; just mark them as ‘submitted’ or ‘accepted’, as appropriate.

Professional activities

***Case Western Reserve University,*** *Cleveland, OH*

Society for Women in Physics, member, *2017-present*

Physics and Astronomy Club, treasurer, *2018*

PROFESSIONAL AND SERVICE ACTIVITIES

* + Call attention to leadership roles
  + Professional organizations (Join the APS now!)

<https://www.aps.org/membership/student.cfm>

* + Activities related to physics/science

Physics and Astronomy Club member/officer, Science Olympiad, etc.

* + Activities that demonstrate organizational skills

fraternity/sorority officer, etc.

* + Other activities including athletics, particularly those that can highlight leadership, such as swim team captain

Awards and honors

* Dean’s list, Case Western Reserve University, 2015-2019
* CWRU Research Showcase, honorable mention
* National Merit Scholarship finalist

AWARDS, HONORS, FELLOWSHIPS & SCHOLARSHIPS

* + Include, if you have any; otherwise omit this category.
  + College students can include high school awards and honors here.

Skills

*Laboratory:*

* Optical system design and alignment
* Sample cleaning and mounting
* Atomic force microscopy
* Analog and digital electronics
* Cryogens
* Computer-device interfacing

*Software:*

* Mathematica
* COMSOL
* ParaView
* Origin

*Coding:*

* Matlab
* Python
* Java
* LabView

SKILLS

* + Provide a thorough list; you never know what might catch a reader’s attention. You can put the items in one line rather than separated as above
  + Include computer languages
  + Besides what you see in the example, the following may give you more ideas: Python versions (Numpy, Scipy, Matplotlib ), SAS, JavaScript, C++ , SQL
  + Any coursework on AI? A big draw now. List any experience in Artificial Intelligence, Algorithms, Data Structures, Linear Algebra, Discrete Math

Data Mining, Inverse Problems, Cryptology, Stochastic Modeling

* + Also: LATEX, HTML/CSS (and Microsoft products are understood)
  + Instruments (e.g., FTIR, NMR, MRI)
  + Experience with technologies (e.g., vacuum systems, optics, cryogenics)
  + Machining and construction (e.g., mill, lathe, 3D printers).
  + Electronic construction (e.g., soldering)
  + In general, break down the skills in all your lab and computation courses, internships, REUs, research and teaching
  + Foreign languages

References

* Prof. Michael Faraday, University of Michigan, [mfaraday@umich.edu](mailto:mfaraday@umich.edu)
* Dr. Albert Michelson, Case School of Applied Science, [amichel@csas.edu](mailto:amichel@csas.edu)
* Ms. Effective Lecturer, Berlin Hochschule, Germany, excellentlecturer@gmail.com

REFERENCES

* + Provide if needed for application
  + Name, title and/or position, institution, email, (phone optional)

Statement of purpose

*A happy man is too satisfied with the present to dwell too much upon the future. But on the other hand, young people especially like to contemplate bold projects. Also, it is natural for a serious young man to envision his desired goals with the greatest possible precision. If I am lucky and successfully pass my examinations, I shall enroll in the polytechnical school in Zurich. I shall stay* *there four years to study mathematics and physics. I suppose I will become a teacher of these branches of natural science, opting for the* *theoretical part of these sciences. Here are the reasons that have induced me to this plan. They are, most of all, my individual inclination for abstract and mathematical thinking, lack of imagination and of practical sense. My desires have also brought forth the same goal led me to the same profession decision. This is quite natural; everybody likes to do that for which he has a talent. Besides, I am also much attracted by a certain independence offered by the scientific profession.*

STATEMENT OF PURPOSE

This may not be needed for your specific application. And even then, like a graduate school application, a separate location may be allocated for this essay.

General advice:

Paragraph: Immediately introduce what you want to do and why.

Paragraph: Describe accomplishments, particularly any related to research. Include any specific skills you acquired, such as training in microscopy, using dedicated software packages, *etc*.

Paragraph: Describe your education, particularly things that are unusual, such as a special track in physics, graduate courses, foreign study or coops. This is also where you can address issues like low grades or a leave of absence.

Paragraph: Describe why you are applying to that particular university and research field. Demonstrate that you have spent some time thinking about how you might fit there. Mentioning specific professors of possible interest can be helpful but it is dangerous to appear to limit your interest to them. You can say something to the effect of “Profs. X and Y and the research group in field W are of particular interest to me.” but you are nevertheless interested in (your selections go here) areas of physics research.