Vera Nicole Hans Smit

WORK EXPERIENCE

Barista & Waitress
Kek Delft [2021 – 2022]

City: Delft | **Country:** Netherlands

Working as part of the waiting staff, as well as working as a barista in a day-time lunchroom

Barista
Alley Cat Bikes & Coffee [2016 – 2022]

City: Maastricht | **Country:** Netherlands

Trained as a barista by the leading staff, experience in working behind the bar as well as serving, working at the counter and in customer sales. Also tasked with day-time management of the business, opening and closing.

Scheduling Assistant
Stichting Pedagogisch Sociaal Werk (PSW) [2019 – 2021]

City: Roermond | **Country:** Netherlands

Tasked with administrative scheduling work, filing the hours of employees of multiple company locations in an online Excel-based system.

EDUCATION AND TRAINING

Master's Degree (MSc) in Archaeological Materials Science
Erasmus Mundus Joint Masters Degree (Évora Univerity, Aristotle University, La Sapienza) [01/10/2022 – Current]

City: Rome | **Country:** Italy | **Field(s) of study:** Archaeological Materials Science | **Final grade:** Current GPA of 28.62/30.00 | **Level in EQF:** EQF level 7 | **Thesis:** A methodology for the analysis of old mortars and the synthesis of compatible repair material

Examples of courses taken: excavation methods, introduction and advanced methods of archaeometry, Greek archaeology, preventative conservation techniques, megalithic culture, digital techniques and laboratory practise in archaeology

Thesis project on the analysis of archaeological building materials, specifically mortars, both physico-chemically as well as mechanically, and the proposal and investigation of compatible repair materials.

Bachelor Degree (BSc) in Physics
Maastricht Universitiy [2018 – 2021]

Address: Paul-Henri Spaaklaan 1, 6229EN Maastricht (Netherlands) | **Website:** https://www.maastrichtuniversity.nl | **Field(s) of study:** Natural sciences, mathematics and statistics: ● Physics ● Mathematics | **Final grade:** 8.1/10, awarded Cum Laude | **Level in EQF:** EQF level 6 | **Thesis:** Vacuum System Bake-Out Techniques for the Einstein Telescope Gravitational Wave Detector

Study: Maastricht Science Programme (MSP)
Track: Advanced mathematics and theoretical physics
Remarks: Other subjects include scientific data analysis and laboratory skills.

High School Diploma (TTO/Bilingual)
Porta Mosana College [2012 – 2018]

Address: Oude Molenweg 130, 6228XW Maastricht (Netherlands)　|　**Website:** https://www.portamosana.nl　|　**Level in EQF:** EQF level 4

Graduated in the following courses: physics, chemistry, mathematics, biology, business economics, French, Dutch, English and Latin.

PROJECTS

[01/03/2024 – 25/09/2024]
A methodology for the analysis of old mortars and the synthesis of compatible repair material The 6-month MSc thesis research project was undertaken as an intern at the Laboratory of Building Materials at the Faculty of Civil Engineering of the Aristotle University of Thessaloniki (Greece). Its first phase included developing a methodology for the analysis of different types of historical and archaeological mortars, including measurements of the granulometry, open porosity, compressive strength and others. Phase two of the research included the development of appropriate repair material for one of the investigated materials. After the mortars were made and cured, they were subjected to several physico-chemical and mechanical tests, such as capillarity measurements, as well as compressive and flexural strength.

Additional activities done during the internship, not related to the thesis research, included investigating the effects of certain waste materials and nanoparticles on lime-based and cement-based materials.

[30/08/2023 – 14/09/2023]
Isotope Laboratory Internship at the Max Planck Institute of Geoanthropology During this two week internship in the isotope laboratory, two types of procedures were studied and executed. Archaeological Australian Wallaby dental samples were prepared for stable isotope analysis by extracting, cleaning, processing and freeze-drying the tooth enamel, whereafter they were analysed using mass spectrometry. Furthermore, the collagen extraction of human bones dating back to Greek Classical Antiquity was done completely to prepare for analysis.

[01/02/2021 – 31/05/2021]
Vacuum System Bake-Out Techniques for the Einstein Telescope Gravitational Wave Detector This project served as the BSc thesis research of the Maastricht Science Programme. During this project, heat simulations were applied to models of the tunnel network of the Einstein Telescope to identify to what temperatures the materials composing the vacuum system could be heated to clear them of any contaminants, without compromising the underground pathways. This project was done as part of the Gravitational Wave and Fundamental Physics research group (GWFP) at Maastricht University.

[04/01/2021 – 24/01/2021]
Building an Automated Small-Scale Telescope Observatory A student-led University project (hosted by Maastricht University) run by a fellow Bachelor student and myself. The mechanical design of the observatory was carried out using Autodesk Fusion 360, and Arduino and Raspberry Pi were used for the electronics. Purposed written software in combination with the physical components was used to carry out the automation.

[01/06/2020 – 30/06/2020]
Sundial Design and Proposal Using the Autodesk AutoCAD software, a design was made for a functional sundial that both accurately represented the time of day as well as functioned as an art piece to be constructed somewhere in the city of Maastricht. A proposal for this design was then delivered to the Municipality of Maastricht. The project was hosted by the Maastricht University.

[01/01/2020 – 25/01/2020]
Timing Accuracies of Astronomical Occultation Observation The project included the assembly and testing of a device capable of timing astronomical observations such that the accuracies of measurements done could be

improved. The biggest project components were the wiring of the electronic components and the progra mming using Python as the main programming language. This project was hosted by Maastricht University.

[01/06/2019 – 30/06/2019]
3D Printing and Assembly, Followed by Test and Verification of a Spectroscope Using an Ultimaker 3D printer and its corresponding design software, a spectroscope was designed and built such that it could be used in combination with a telescope and provide data for the analysis of light spectra coming from light-emitting objects in space. Every component was designed and printed separately, whereafter it was assembled completely manually. This project was hosted by Maastricht University.

HONOURS AND AWARDS

[05/07/2021] Maastricht University
Cum Laude Distinction For a 8.1/10 cumulative grade point average, at graduation a distinction of Cum Laude was awarded.

CERTIFICATIONS

[2016]
Cambridge CAE Certificate

Advanced English language certificate

[2018]
IB Higher Level English Language and Literature

A higher level English language and literature course taught over the course of several years. The certificate was obtained in 2018.

[2018]
Cambridge Global Perspectives Certificate

A certificate awarded at the end of a course taught about writing scientific writing and research. The final paper written about the effects of nature and nurture on criminality. For this paper, a distinction grade D1, was awarded. Grading ran from lowest A1 and highest D2.

LANGUAGE SKILLS

Mother tongue(s): Dutch

Other language(s):

French
LISTENING A2 **READING** B1 **WRITING** A2
SPOKEN PRODUCTION A2 **SPOKEN INTERACTION** A2

English
LISTENING C2 **READING** C2 **WRITING** C2
SPOKEN PRODUCTION C2 **SPOKEN INTERACTION** C2

German
LISTENING B1 **READING** B1 **WRITING** B1
SPOKEN PRODUCTION B1 **SPOKEN INTERACTION** B1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

MATLAB / Arduino IDE / AutoCAD / Autodesk Fusion 360 / UCSF Chimera / Photogrammetric work

Microsoft Office
Microsoft Word / Microsoft Office / Microsoft Powerpoint / Outlook / Microsoft Excel