

AlmaLaurea.net: the database for international graduates

Andrea Cammelli, Angelo Guerriero, Alberto Leone, [Matteo Sgarzi](#)

Consorzio Interuniversitario AlmaLaurea, Viale Masini 36, 40126 Bologna, Italy.
matteo.sgarzi@almalaurea.it

Keywords

International Graduate Database, AlmaLaurea.net, E-recruitment, Graduate Surveys

1. EXECUTIVE SUMMARY

1.1 Background

For a few years, in addition to the institutional mission of teaching and awarding degrees, the majority of European Universities have also provided students with new placement and career services with the aim of supporting them in their transition from graduation to the early years of their job careers. This approach arises from the need to face domestic and international academic competition; it is therefore strategic for Universities to keep close relationships with their former students by providing them with the services required to accelerate their entry into the job market and at the same time keeping track of and acquiring useful information on the effectiveness of their academic qualifications and work careers. Starting from the present year 2008, international Universities have the opportunity to join the AlmaLaurea.net network with a view to promoting their graduates' placement. The system also provides Universities with better and up-to-date statistical data aimed at improving educational performances and increasing the effectiveness of education.

1.2 Features

The paper contains a full description of the online services and technical solutions adopted to make the former AlmaLaurea.it system more international, overcoming the natural barriers still existing both in national educational systems and labour markets. Among the technological solutions adopted, mention has to be made, in particular, of the grid for academic qualification comparison, which allows users to input queries on degrees without any concern for local contexts and terminology. Another distinctive feature is a solid data structure and data encoding system that allow CVs to be automatically translated with minor adaptation/localization work (graduate questionnaires have a multiple choice structure with very little open text information).

1.3 Benefits

After the AlmaLaurea.net implementation, graduates will benefit - completely free of charge - from broad and effective online placement services aimed at facilitating their careers by improving quality of their personal CVs, providing certified information on degrees, ensuring a wider dissemination on the global networks and by offering them post-graduate training and further education opportunities. Companies will have at their disposal a great comparative, multilingual and transnational CV database, including certified degrees, graduates competences, early work experiences. The CVs belong to several International Higher Education Institutions from different national backgrounds and contexts.

1.4 Conclusions

The idea of an International Graduate Database results from the successful experience of the AlmaLaurea Interuniversity Consortium in the Italian context [Cammelli et al., 2007]. Thanks to the AlmaLaurea.net framework, foreign universities are offered the opportunity to join AlmaLaurea taking advantage of same system functions and features which have been designed for the Italian members. Foreign universities will be able to access high-quality and readily available information as well as graduate placement support, while companies can take advantage of the recruitment services supplied. Universities have to agree with AlmaLaurea on a number of joint actions to undertake in order to adjust the system to the existing University setting, develop data acquisition tools and disseminate CVs in the local and international labour markets.

2. FROM ALMALAUREA.it TO ALMALAUREA.net (VIA THE EAL-Net PROJECT)

AlmaLaurea originated from a research work initiated in the early 1980's and completed in 1988. On that occasion, a group of research workers coordinated by professor Andrea Cammelli, lecturer of Social Statistics at the University of Bologna, realized that there were no surveys available on employment opportunities enjoyed by graduates.

The incompleteness of official statistics and the reflection on the condition of students and graduates cast a light on the need to create a set of documents that would provide university governance bodies with a reliable and updated tool for a better assessment and planning of teaching activities. The information available for each graduate facilitated the evaluation of completed academic courses and of the diversity of the assessments of the different educational levels acquired in different faculties and courses of studies. As a result, it was also possible to prepare detailed CVs to ease fair access to the labour market, thus reducing the time needed for the supply and demand for labour to meet.

In the light of these aims, in 1993, the Statistical Observatory of the University of Bologna started the ALMALAUREA Project. In 1994, the experience made in Bologna was extended to the other Italian universities and the Ministry for University, progressively and rapidly raising the number of CVs included in the database. Since January 1997, the database has been available on the Internet.

In October 2000, AlmaLaurea became an Inter-university Consortium that currently comprises 51 universities that have freely associated and partly fund its expenses. The database contains 1,000,000 CVs, accessible online via the www.almalaurea.it website and modifiable by graduates through their personal username and password, so as to keep them updated with work and training experiences.

Evidently, AlmaLaurea did a pioneering work in Europe. This is confirmed by the fact that, since July 2005, the European Union has funded the development of the prototype of the EAL-Net database of European graduates. The prototype was created in 2006 and was officially presented in Bologna in March 2007 to Italian and European authorities and a large number of representatives of European and non-European universities.

The AlmaLaurea Consortium supported the setting-up of the new European prototype for the following reasons:

- to react to the internationalization of labour markets and to provide young people with work opportunities abroad;
- to implement the integration process of the European higher education system initiated in Bologna in 1989 with the signing of the Magna Charta by a large number of European universities (the Bologna Process);
- to meet the need to ensure the comparability of statistical data at European level.

From the current year 2008 on, the prototype set up in the framework of the EAL-Net project and its new multilingual functions will be fully integrated in the AlmaLaurea system, thus enabling foreign users excluded from the Italian labour market and university system to access the services offered.

By means of the internationalization of its system, AlmaLaurea has set the following goals:

- disseminating the CVs of graduates from Italian Universities in foreign work markets, and in particular in the UK, where much interest has arisen in Italian graduates;
- acquiring and disseminating CVs of graduates from foreign universities that are directly associated to the AlmaLaurea system;
- Collecting and disseminating foreign job vacancy adverts by means of the “job notice board”
- Collecting and disseminating information on second- and third-level university courses held in foreign universities via the “postgraduate notice board”;
- Disseminating the surveys obtained from the graduate database:
 - Sharing AlmaLaurea methodologies and surveys on Italian graduates;

- Subsequently, when enough data have been collected and foreign universities involved, it will be possible to collaborate to draw up and disseminate the international “Graduate Profile” and “Employment conditions” studies.

The different stages that have led AlmaLaurea to develop its own international strategy up to the creation of the European graduate database prototype (in the framework of the EAL-Net project) and its main technical and functional features are described below.

3. THE INTERNATIONAL DATABASE

The internationalization process of the AlmaLaurea database has remote origins. Indeed, between 1999 and 2001, the AlmaLaurea Consortium had already begun to work on the extension of its database at European level, promoting an initiative, funded by the European Commission via the Leonardo Project, which saw the participation of 11 universities from 8 different European countries. The project was completed with the drawing up of a feasibility study containing the guidelines for a pilot project that was submitted to the European Commission.

The conclusions drawn by that project laid the foundations of the subsequent EAL-Net project, funded by the European Union with eTEN funds from July 2005 to March 2007.

EAL-Net aimed to set up a “working” database prototype of European graduates collecting the CVs of graduates from the French, Dutch, Polish, Hungarian and Italian universities that are members of the AlmaLaurea Consortium.

The new European database can be easily accessed by European and international companies and agencies in 6 different languages (those of the participating countries and English), thus facilitating the placement of young graduates in the work market and promoting their mobility in Europe.

Information on study courses completed and first work experiences is provided directly by graduates who fill in an online questionnaire which generates the CV, subsequently certified by the relevant university as far as academic studies are concerned. The implementation of the project involved the Universities of Warsaw (Poland), Maastricht (Netherlands), Paris Marne-la-Vallée (France) and Budapest-ELTE (Hungary), as well as two private partners, INTRASOFT (Luxembourg) and TARKI RT (Hungary) that collaborated in the localization of the system and of the services provided to companies in the different national contexts.

The beneficiaries of this system are universities and higher education institutions, enterprises and trade and business associations, as well as European graduates.

What are the main features that make this database unique?

Beside the high quality of the database content, enabling EuroAlmaLaurea to compare with other public and private entities operating in the e-recruitment field, it is worthwhile to underpin that:

- the graduates’ academic careers are certified by their relevant universities and not simply based on the graduates’ statement;
- the questionnaires that originate the CVs are filled in by graduates before completion of studies, that is before they leave university, thereby increasing the participation rate and the number of CVs included;
- CVs can be updated and supplemented by graduates themselves as a result of the work experience accrued after completion of studies;
- the CV is conceived with a single format, with European content, orientation and organization, thus easing the mobility of young graduates and the advancement of the harmonisation of higher education studies started with the Bologna process;
- the system can be consulted in the languages of the participating partners: French; Dutch/Flemish, Polish, Hungarian, Spanish and Italian;
- the system is fully compliant with the privacy and personal data protection legislation in force in each participating country;
- the query system of the database takes into account the different educational systems and the related classification of academic qualifications;

- By means of the documents collected in the database, universities can gain access to internationally comparable and updated information on graduates, the main features of their academic career, their skills and professional aspirations. As a result, universities can attain a better awareness of the situation, easing decision-making processes and the definition of educational strategies.

4. THE SETTING-UP OF THE SYSTEM

The expansion of the AlmaLaurea system in an international context is the result of a twofold action. On the one side, an attempt was made to generalize its structure and content (internationalization), while, on the other side, an effort was made to take into account and adjust to the specific features and needs of the new national systems (localization). This action required a careful redesign and review of the processes underlying the system's functioning and its support information systems.

A new integrated data structure with multilingual functions and new models of data encoding and standardization was placed at the core of the entire system.

4.1 General aims and limitations

If an international database of graduates, reaching at least a European level, has to be effectively consulted by all users, it should not only envisage consultation in many languages, but also and above all, should not require specific knowledge of the university systems adopted in the different countries where graduates included in the database have achieved their degrees.

In order to achieve this goal, the following items should be available in the relevant languages:

- the system functions (first of all, the query of the database) and the site content (project presentation, assistance for users, aid);
- the content introduced by users (CVs, job vacancy adverts, supply of postgraduate education, statistical data).

The first goal, though daunting, was achieved by adequately redesigning the diverse applications and by managing the related content via a joint drawing up system.

Conversely, the second goal can only be partially achieved, because, at least as far as the CVs inputted in the database are concerned, the translation of the open text boxes (for example, the personal description) can only be supplied by the person concerned.

To ease the users' task, as further explained below, intensive standardization of parts of the content of CVs was implemented, making a concise, though essential, subset of information items available in all the required languages.

Multilingualism is not the only access key to the system; as previously mentioned, it is still more crucial to draw up a common system for the description of university qualifications.

Being able to search first- or second-level graduates, in a specific course group, definable with a higher or lower level of detail, is the main access key to the graduate database. Any extra piece of information contained in the CV, provided it can be encoded and standardized (for example, the level of fluency in one language or specific technical skills), can be utilized as one further criterion for the selection of CVs.

5. SYSTEM OVERVIEW

Before analysing more specific issues related to the internationalization process, a general outline of the overall system and the way in which it is managed and utilized will be presented. [Figure 1].

The core of the system is the database of graduates, accessible to the different system users via the world wide web.

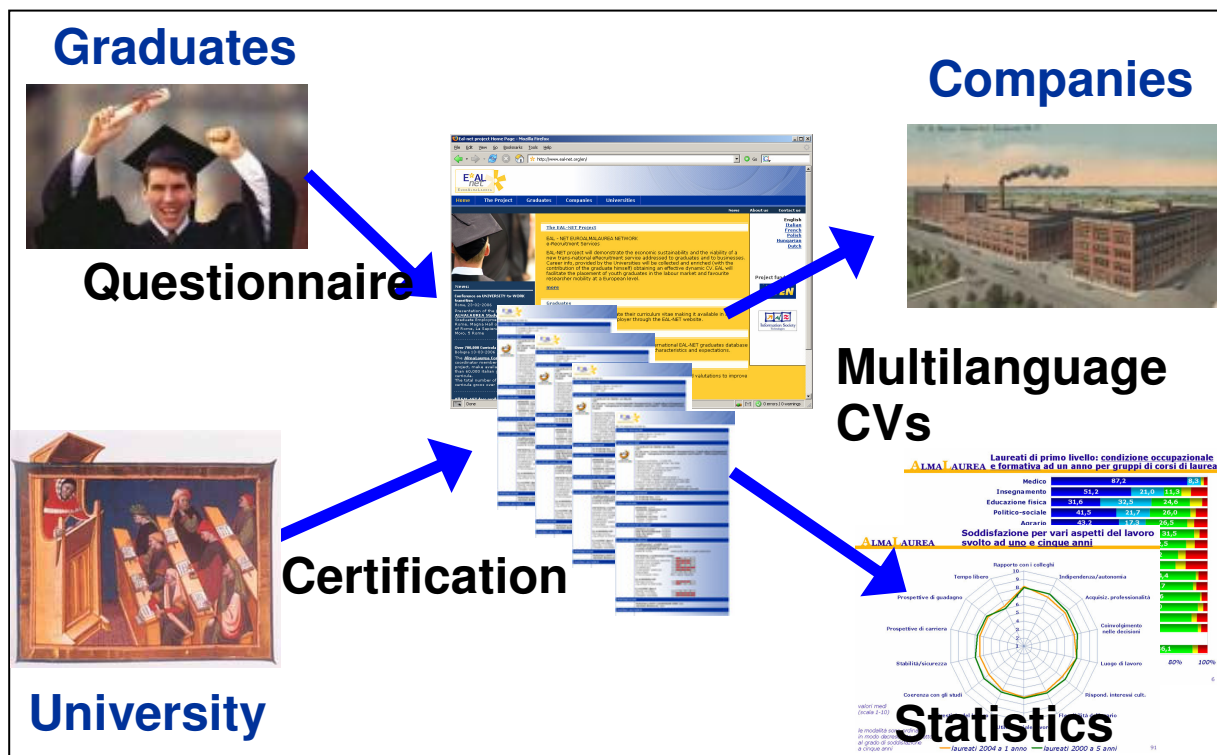


Figure 1. Overall layout of the EAL-NET System. Information acquisition (questionnaire and certification), generation of CVs and statistical data.

For the sake of simplicity, a description of the process's main cycle is provided, including the collection, certification and dissemination of CVs. The overall system is managed by countless auxiliary processes (accreditation of universities and authorization of personnel, user assistance, accreditation and qualification of companies, collection of statistical data, etc).

5.1 Registration of undergraduates

The main user, i.e. the graduate, contacts the system just before degree course completion, after consulting the documents supplied by the secretary's office and the information available on the university website.

The first operation to perform is the standard registration, whereby the undergraduate introduces his or her own personal data and basic information on the university course to be completed. At the end of the registration procedure, the undergraduate will be granted the credentials required to access the site's functions.

The undergraduate is subsequently allowed to fill in the questionnaire supplementing the information entered during the registration procedure with further data that are utilized to build the CV and for statistical purposes. These include the address/addresses, to be contacted by companies and by the staff for possible interviews and surveys, further university education (previously-completed qualifications, study abroad experiences, details on the qualification that is about to be achieved), self-assessment of language and IT skills, intentions and future prospects (intention to pursue postgraduate studies or to enter the labour market), economic conditions and social background of the family of origin.

Obviously, information provided solely for statistical purposes is not accessible via the database and is however only disseminated in aggregate form, strictly safeguarding the undergraduates' privacy. The language utilized to view the questionnaire is chosen by the user, regardless of the country where the university is located. Figures 2 and 3 show the questionnaire sections devoted to the self-assessment of IT skills, respectively in English and Hungarian.

SZÁMÍTÁSTECHNIKAI / INFORMÁCIÓTECHNOLÓGIAI (IT) ISMERETEK (IT)

[D.93-D.102] IT ismeretek

	nincs	korlátozott	közepes	jó	kiváló
Adat-átviteli hálózatok	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adatbázis kezelés (Oracle, SQL server, Access)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
CAD/CAM/CAE ismeretek	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Internetes ismeretek	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Multimédia ismeretek (hangok, képek, videó)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Operációs rendszerek	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Programozási nyelvek	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Táblázatkezelés (EXCEL)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Web-site építés	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Word szövegszerkesztés	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[D.103] Van-e ECDL (European Computer Driving Licence) bizonyítványa?

Igen Nem

Figure 2. Self-assessment of IT skills in Hungarian.

Computer skills

[D.93-D.102] IT skills

	None	Limited	Fair	Good	Excellent
Computer Aided Design/Manufacturing/Engineering	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Data transmission network (technology and protocols)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Database (Oracle, SQL Server, MS Access, MySQL, ...)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Internet surfing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Multimedia (sound/image/video processing)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Operating Systems	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Programming Languages	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spreadsheets	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Website implementation	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Word processor	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[D.103] Do you have an ECDL (European Computer Driving Licence) certification?

Yes No

Figure 3. Self-assessment of IT skills in English.

5.2 Data validation

Universities are expected to verify each graduate's personal data and information on academic qualification. This operation can be performed online by the responsible staff of the relevant university by means of the site tools, or offline by AlmaLaurea personnel, by crosschecking the lists of graduates that are periodically provided by universities.

Once universities have validated the academic qualification included in each graduate's CV, data relevant to the qualification can no longer be modified by the user.

The validation of data is a feature that distinguishes this method from other important and widespread e-recruitment systems. This is why the system can only be available for graduates from universities participating in the project who have achieved their qualification subsequent to service activation, as the university staff need to be able to validate the qualification and this is possible only after a specified date.

Non-validated records, after a period of latency, are placed offline and thus become unavailable for the companies. This rules out the possibility that web users other than accredited undergraduates or undergraduates from non-participant universities use the service.

5.3 Access to the database

The CVs created by the system are made available for the companies that are allowed to access the service, i.e. those that have subscribed a contract of use whereby access to information is granted for personnel selection purposes only. Companies are allowed to explore the database using the selection criteria available and to select and purchase the CVs of graduates that are deemed to be interesting.

The system is also aimed at analysing, monitoring and assessing the quality of the university system by processing statistics based on the data collected and the assessments and opinions supplied by the subjects involved. As is already the case in the AlmaLaurea context, in the future there might be a possibility of re-interviewing graduates after predefined periods of time have elapsed since degree completion to evaluate the actual effectiveness of their academic qualifications in the labour market.

6. THE STRUCTURE OF THE QUESTIONNAIRE AND THE CV

The vast majority of the information entered by the undergraduate while filling in the questionnaire is not inputted as open text, but rather via the selection of items out of a list. These encoded entries can be used immediately and are automatically translated without any action being performed by the user. Among the information items entered in the CV, a number of open text fields do not need translating - for example the names of the companies where graduates have carried out training periods or internships.

As a result, if necessary, the graduate has the task of translating into the relevant languages the open texts that might require a translation - for instance, the personal description or the title of the degree dissertation.

The questionnaire, in its most complete formulation, is articulated as follows:

information that is mainly used in the CV

- Personal data;
- Address (first address, second address, fixed and mobile phone numbers, email address);
- Secondary school. Information on pre-university studies. Type and grade of secondary school-leaving certificate;
- Previous university experiences. Information on previous university experience, if carried out, even when uncompleted;
- Vocational training courses;
- Foreign language skills. Self-assessment of knowledge of foreign languages;
- IT skills. Self-assessment of skills in a number of IT sectors;
- Dissertation/Final test. Information on degree dissertation or final test. Besides the title of the dissertation, its duration, subject matter and key words for classification purposes are also entered.
- Study abroad experiences. Place, aim and duration of study experiences carried out abroad, if any. Mention is made of the number of examinations that may have been taken abroad and subsequently validated.
- Work during university studies. Work experience carried out during university studies, if any.
- Intentions and future prospects. Intention to pursue studies (if this is the case, specification of the type of studies that the undergraduate intends to pursue) or to enter the labour market.
- Characteristics of the job sought.

Information used exclusively for statistical purposes:

- Critical analysis of the university experience that has just been completed. Class attendance level, relationships with other students and academic staff;

- Infrastructure: classrooms, laboratories, libraries and study rooms. Assessment of the infrastructure of university and of the town where the university is located;
- Information on family background. Identification of the student's social and cultural background.

Every section is further subdivided into a set of open-text or multiple-choice questions. In the former case, when a translation is required, the answer can be given in any of the languages envisaged by the system.

6.1 Safeguard of local identities

Standardisation cannot undermine the possibility of supplementing each CV with information that is significant only at local level. This is also the case with the data collected for purely statistical purposes. Information that is meaningful in the domestic context may not be so internationally. The system envisages a collection of data in the questionnaire that can be differentiated by nation. It goes without saying that this type of information does not easily lend itself to being used as a selection criteria in the search and that, as a result of its nature, cannot be translated automatically.

Questionnaires can therefore be assembled using predefined components, leaving out information that would be meaningless in the local context or, conversely, adding data that are significant and meaningful at local level only, and finally reorganizing the order of the questions to meet specific needs, highlighting specific sections.

The localisation of the questionnaire envisages, for each country, the possibility of:

- defining the paging of the questionnaire;
- defining the section organization of each page;
- presenting different lists of options in a number of multiple-choice questions;
- deciding, for each question, if the answer can be entered or not in the CV or can only be used for statistical purposes.

By way of example, in the EAL-Net project, in the framework of the Dutch localisation of the questionnaire, a clear-cut distinction was made between the questions related to the CV and those that served only the purpose of collecting statistical data. The questionnaire was therefore split into two successive pages. Conversely, in Poland and Hungary, the questionnaire structure adopted was more similar to the Italian model, with six pages, without envisaging a sharp distinction between the information used for the CV and that utilized for statistics.

Mention has to be made that the graphic, the colour and texts chosen in any case clearly identify information used solely for statistical purposes.

6.2 Classification of academic qualifications

Academic qualifications are classified according to their level and subject area. After considering the possibility of using different types of classifications and standardizations, for the first stage of the development of the pilot project, the decision was made to opt for a categorization reflecting the Italian system whereby academic qualifications are subdivided into degree classes.

In the Italian university system, academic qualifications are grouped in degree classes that are split between first- and second-level qualifications. Moreover, degree classes are also subdivided according to the different subject areas.

In the prototype, the subject area of the academic qualification is determined according to a two-level classification (area and sub-area). First- and second-level qualifications envisage different sub-area classifications.

The classification is made by the person in charge of project of each university and consists of assigning to each academic qualification one level (based on the classification into cycles envisaged by the Bologna Process), one subject area and one or more sub-areas, up to a maximum of four.

The classification offers two possibilities at the same time:

- the possibility of defining similarity criteria for qualifications granted by different universities and countries;
- the instantaneous translation of the class of the academic qualification in each language of the project.

Obviously, the classification adopted for the prototype might require a partial or total overhaul. Nevertheless, its adoption, in spite of its limits, represents the pivot of the whole system as far as the management of the CVs for the database is concerned. In the future, it may be supplemented or sided by other types of classifications to improve its user-friendliness. Figure 4 shows an example of the search form that enables the user to select CVs by academic qualification. Available entries are filtered, concealed or viewed, according to the selections made. The example illustrates the selection out of second-level degrees in the engineering subject area.

The screenshot shows a search form titled "University experience" with three dropdown menus. The first menu, "Disciplinary Area (multiple choice)", lists various fields including Agriculture, Architecture, Chemistry, Defence, Economics, Education, Engineering (highlighted), Foreign Languages, and Geology/Biology/Geography. The second menu, "Kind of degree (multiple choice)", lists "NO REQUEST", "1st cycle degree - Degree/Bachelor", and "2nd cycle degree - Master" (highlighted). The third menu, "Degree/Course (multiple choice)", lists various engineering disciplines such as Aerospace, Industrial Management, Automation, Biomedical, Chemical, Civil, Computer, Electric, and Electronic (highlighted).

Figure 4. Detail of the search form on the CV database. CVs are identified according to the level and the subject area of the academic qualification.

6.3 Foreign languages and IT skills

This section of the CV contains the self-assessments of foreign language and IT skills. The section is fully translated and available in all the project languages. Each graduate inputs his/her native language and subsequently the other languages spoken, specifying the level of proficiency (basic, elementary, lower intermediate, upper intermediate, advanced, very advanced and native-like) for both writing and conversational skills.

The same levels of proficiency are utilized for the self-assessment of IT skills. In this case too, there is a predefined list that, though not providing the possibility of an exhaustive description of the subject's competences, is easily translated into all the languages.

6.4 Characteristics of the job sought

This section of the questionnaire too is highly structured and presents the graduate with the possibility of specifying both his/her preferences concerning the field of activity of the ideal employer (finance and insurance, transport, etc) and the favourite department inside the company (R&D, administration, etc). Data are encoded and automatically translated in the different project languages. They can also be used as CV search and selection criteria.

Search Result

This is the list of graduates found in our database

Number of CV found: 269

Beware: some CVs have not be still validated by Universities, therefore some information (e.g. title degree, graduation mark, graduation date) have been provided by graduates.

▶ [Discover how to save the results of your query and how your plafond will be reduced.](#)

You can freely preview each curriculum vitae. The preview does not contain anagraphic data and contacts. Once you have selected the CVs you want to buy, press the 'save' button and download the full version of CVs.

[Show your selection criteria](#)

Save all the CVs: 100 ▶ Save

▶ Would you like to save only some CVs?

Number of selected CVs: ▶ Save

Select / Unselect all the CVs of this page + -

Page 1 of 10, graduates 1 - 10 of 100 found.

1 2 3 4 5 6 7 8 9 10
[next page](#) ▶

University/Degree	Graduation date/mark	Age	ID
Eötvös Loránd Tudományegyetem (HU) GEOLOGY, BIOLOGY, GEOGRAPHY Biology Master degree Auto-Certified Cv	12-2007 5 (out of 5)	33	1000 🔍 View <input type="checkbox"/> Select
Eötvös Loránd Tudományegyetem (HU) HUMANITIES Classical Philology and Literature Master degree Auto-Certified Cv	12-2007 4 (out of 5)	24	3266 🔍 View <input type="checkbox"/> Select
Eötvös Loránd Tudományegyetem (HU) FOREIGN LANGUAGES Languages and Literature/ European and American (Modern) Master degree Auto-Certified Cv	12-2007	29	1002 🔍 View <input type="checkbox"/> Select
Eötvös Loránd Tudományegyetem (HU) MATHEMATICS, PHYSICS, NATURAL SCIENCES Mathematics Master degree Auto-Certified Cv	12-2007 3 (out of 5)	22	676 🔍 View <input type="checkbox"/> Select
Eötvös Loránd Tudományegyetem (HU) MATHEMATICS, PHYSICS, NATURAL SCIENCES Mathematics Master degree Auto-Certified Cv	12-2007	24	986 🔍 View <input type="checkbox"/> Select
Eötvös Loránd Tudományegyetem (HU) MATHEMATICS, PHYSICS, NATURAL SCIENCES Mathematics Master degree Auto-Certified Cv	12-2007	23	1001 🔍 View <input type="checkbox"/> Select

Figure 5. Example of a search result in the CV database. By clicking, on each line, on the “view” link, the user can preview the single CV.

7 DATABASE SEARCH

Registered companies are allowed to use the database selecting CVs according to specific information items:

- personal information (country of origin, region or town of residence, age, gender);
- information on academic qualification (university, level of academic qualification, subject area and sub-area, graduation date);
- foreign language skills;
- IT skills;
- plans for the future;
- favourite company area.

Unlike the Italian version of the system, there is no possibility to select the CV by secondary school-leaving certificate nor, for the time being, by favourite economic sector.

Once the search parameters have been set, the system selects the CVs according to the criteria that have been inputted. The user can preview each CV (without personal data and addresses) and decide whether to add it or not to the list of CVs to purchase.

The selection process finalizes with the access to the complete version of the CVs that can be saved on the user's computer.

8. ACCESS OF NEW UNIVERSITIES

The management of a newly-entered university requires that the system be supplied with all necessary information. If the country where the university is located is not yet included in the system, a list of the local academic qualifications (classified by cycle) and of secondary school-leaving certificates is required.

Subsequently, all specific degree courses will be classified by level and subject area group based on the standard classification.

Finally, if the languages spoken in the country where the university is located are not yet included in the system, all the encoded information items, including the labels used in the online services, will have to be translated. The translation of the site content is not mandatory but may turn out to be very useful to improve communication with students and companies.

9. FUTURE PROSPECTS

The process of creating transnational labour markets is an on going process that will progressively affect recruitment dynamics in the forthcoming years at European and international level¹. Among the top 1000 enterprises of the European Union, the 45.5 % of them regard international cross-border recruiting as very or rather important. The role of international on line job portals in this sense is becoming very relevant. Currently three out of ten European enterprises make use of foreign internet job portals and another 18.8% plans to use these portals to post job ads and search through CVs databases (CHRIS 2008).

Starting from the current year 2008, the integration process of the pilot database created through the EAL-Net project into the AlmaLaurea system has begun. This new development will enable AlmaLaurea to extend significantly its sphere of action beyond Italy.

Short-term objectives include opening the existing data base of graduates in the Italian universities (to date amounting to one million CVs) to European employers and offering graduates from foreign universities the possibility to register in the system.

¹ Several surveys in the last years showed that a lot of the enterprises regard international cross-border recruiting as a chance to support the build-up and development of foreign sales and production units and get away from the bad situation on the local labor market. In total 86.8% of the questioned enterprises see this as a valid cause of cross-border recruiting. (CHRIS 2008).

In the light of this second goal, the international database prototype has been developed to start the following types of cooperation with foreign universities:

1) Direct memberships to AlmaLaurea.net

International Universities can apply for AlmaLaurea consortium membership exactly as is the case for Italian universities. Every partner university should meet the following requirements: inform (all) students and graduates on the importance of the initiative and the way they can access it; collect the graduates' CVs in a systematic way; certify the graduate's University career.

In return, AlmaLaurea commits itself to making graduate CVs available to Italian and international companies, thus contributing to a successful university-to-work transition for graduates; drawing up periodic reports on the graduates' performances and characteristics ("Graduate Profile"); making all data available for local university researchers and scholars; promoting the supply of postgraduate university education on the international portal; informing targeted groups of graduates on specific postgraduate education.

2) Establishment of local graduate DBs

AlmaLaurea is committed at international level to the provision of consultancy service for the implementation of information systems with characteristics and functions similar to those of the AlmaLaurea system, building local graduate databases (at institutional, regional or national level) capable of interacting with the broader AlmaLaurea.net international system.

3) Data exchange frameworks between AlmaLaurea and others already existing graduate databases

AlmaLaurea wishes to establish relationships with existing graduate database initiatives all around the world aimed to promote local graduates internationally through the AL.net channel (international CV format in English), disseminate CVs both in the Italian labour market and in main European labour markets (UK, Germany, etc).

Web links between AlmaLaurea.net and the local databases could be created in order to redirect recruiters to the local website in order to perform more in-depth CV searches at local level and in the local language. This will set the conditions for the establishment of an international CV database network.

Admittedly, the path undertaken can be long and complicated, but we are fully aware that this is the path to follow, as confirmed by the European Commission's communication to the Council and European Parliament of May 2006 underpinning that [...] the graduates' entry into the labour market is a responsibility shared by universities, employers, trade and business associations and governments and that success in the work market should serve as one of the indicators of the quality of universities. This should be duly recognised and rewarded in the management, funding and assessment regime [...]. (European Commission, 2006).

10. REFERENCES

A. Cammelli et al (2007). *ALMALAUREA: from University courses evaluation to graduates placement*. EUNIS 2007 Conference Proceedings. Located [28.01.2008] on World Wide Web: <http://www.eunis.org/events/congresses/eunis2007/CD/pdf/abstracts/p1111.pdf>

European Commission (2006). Communication from the Commission to the Council and the European Parliament - Delivering on the modernisation agenda for universities - Education, research and innovation, Brussels, 10.5.2006, COM(2006) 208

European Commission (2002). Recommendation on a common European format for curricula vitae (CVs), Brussels 11.2.2002, COM (2002) 516.

A. Guerriero, A. Leone (2007). *Il Progetto EuroAlmaLaureaNet*, in *IX Indagine AlmaLaurea sulla condizione occupazionale dei laureati*, Consorzio Interuniversitario AlmaLaurea, Bologna, Il Mulino

W. König, T. Weitzel, A. Eckhardt (2008). *Recruiting Trends 2007, European Union*, Centre of Human Resources Information Systems (CHRIS), Frankfurt University, Germany.

M.Sgarzi (2005), *AlmaLaurea nel solco del Processo di Bologna, Il progetto EuroAlmaLaurea-Net in AlmaLaurea* in *Lavorare dopo la laurea, caratteristiche e percorsi occupazionali*, Consorzio Interuniversitario AlmaLaurea Bologna, Il Mulino.