Aptar Graduate Program “Inspire Me”

Project under development

Hiring Manager: Mauro Petrilli

Department: Planning Dept Aptar Chieti

Plant:
❑ Chieti

Name of the Project:
Intracompany planning/purchasing flow process optimization

The Project in detail:
Review of the flow, identification of strengths and weaknesses and definition of a new automatized flow.

Candidate Profile:
Management engineer with IT skills

Planned Activities:
Analysis of the actual exchange of needs between plants
Identification of system weaknesses
Technical knowledge of the steps
Identification of an optimized solution

Company Tutor: Daria Zezza

Project under development

Hiring Manager: Mauro Petrilli

Department: Technical Division Aptar Pescara

Plant:

❑ Pescara

Name of the Project: IOT device development

The Project in detail:

Implementation of an IOT device that provides for predictive maintenance of several machines.

Candidate Profile:

Informatic/Software engineeer

Planned Activities:

Software implementation of an IOT (e.g. SIEMENS IOT 2040) for predictive maintenance of several machines

Company Tutor: Danilo Di Menco

Project under development

Hiring Manager:
D'Incecco Marco

Department:
Technical Division - Aptar Pescara

Plant:
❑ Pescara

Name of the Project
Predictive Maintenance on high speed machine (GSA)

The Project in detail:
The candidate has to study and implement a Predictive Maintenance system on one high speed machine in order to reduce the number of breakdowns.

Candidate Profile
Electronic/Mechanic Engineer

Planned Activities:
- Breakdown analysis, at list one year (Muda)
- Feasibility study of the predictive maintenance system
- Implementation of the system with PDCA
- Standardization on the other machines, if possible (Kaizen)

Company Tutor: Devis Claudio

Project under development

Hiring Manager: Radoccia Angelo

Department: Aptar Pescara

Plant:
❑ Pescara

Name of the Project:
Processo Controllo Qualità con utilizzo di smart glass e algoritmi di codifica difetti.

The Project in detail:
Ricerca possibili cause di difetti, con ricerca e implementazione di un applicativo

Candidate Profile
Software engineer, Mechanical Engineer

Planned Activities:

Company Tutor: Paolini Daniela

Project under development

Hiring Manager: Radoccia Angelo

Department: Molding Aptar Pescara

Plant:
❑ Pescara

Name of the Project:
Monitoraggio della produzione e confezionamento di microcomponenti in plastica con valutazione degli errori di quantità

The Project in detail:

Candidate Profile
Software engineer

Planned Activities:

Company Tutor: Alessandro Trulli

Project under development

Hiring Manager: Magnacca Donato

Department: Molding Aptar Pescara

Plant:
❑ Pescara

Name of the Project:
Injection process for platics: define method to calculate energy balance, define KPY (Key Performace Indicator) to refer.

The Project in detail:

Candidate Profile
Mechanical engineer, chemical engineer

Planned Activities:

Company Tutor: Magnacca Donato

Project under development

Hiring Manager: Magnacca Donato

Department: Molding Aptar Pescara

Plant:
❑ Pescara

Name of the Project:
Organizzazione di una metodologia di controllo di un processo di stampaggio ad iniezione di materie termoplastiche con l'utilizzo del metodo PCA (Principal Components Analysis).

The Project in detail:

Candidate Profile
Mechanical engineer, chemical engineer, software engineer

Planned Activities:

Company Tutor: Magnacca Donato

Project under development

Hiring Manager: Mauro Petrilli

Department: Technical Division Aptar Pescara

Plant:
❑ Pescara

Name of the Project
Scheduling libraries for production planning

The Project in detail:
Implementation and usage uf software libraries to make the actual planning software more flexible.

Candidate Profile
Software Engineer

Planned Activities:
Implementation and usage of software libraries to make the actual planning software more flexible.

Company Tutor: Danilo Di Menco

Project under development

Hiring Manager: Edoardo Rosati

Department: Quality

Plant:

❑ Chieti

Name of the Project

«Re-design and implementation of an advanced system for internal non-conformity management»

The Project in detail:

The candidate will have to study the actual non-conformity management system, to design tools and improve the performance of the current management of internal non conformities.

He/She will have to put in place the tools and regularly follow their application, with the creation of specific set of reports, and periodic comunication to management and to shopfloor operators.

Candidate Profile:

Engineer, Business management

Planned Activities:

- Mapping of current situation
- Definition of improvements to the system
- Data organization and report creation
- Comunication to entities inside the company at all levels
- Implementation and follow-up of activities agreed
- Identification and introduction of new technologies and methodologies
- Identification of projects of continuos improvement

Company Tutor: Edoardo Rosati

Aptar beauty+home

Project under development

Hiring Manager: Edoardo Rosati

Department: Quality

Plant:

❑ Pescara

Name of the Project

«Design of a Management system for quality suppliers in accordance to ISO 9001:2015 norm»

The Project in detail:

Collaborate with the existing quality suppliers team to improve the overall process. The candidate will have to map and improve the existing reporting and processes, by introducing or updating the existing documentation, and by empowerment of existing resources with application of methodologies and research for new methods and tools.

The candidate will help in transferring continuos improvement approach to suppliers.

He will help in harmonizing this with the current ISO management system.

Candidate Profile:

Engineer, Business management

Planned Activities:

- Analyze of current documentation for supplier management
- Improvement of existing reports
- Introduction of new investigation and management methodologies
- Research of new tools to improve suppliers performance
- Implement new projects at suppliers

Company Tutor: Edoardo Rosati

Project under development

Hiring Manager: Nando Cutarella

Department: Sustainability

Plant:
❑ Chieti

Name of the Project
«Circular Economy: develop the business model of Aptar »

The Project in detail:
The candidate will need to support the development of business model based on Canvas methodology. We want to define the value proposition, partners, key activities and benefits related to the circular economy approach into the packaging segment.

Candidate Profile:
Eco-management, environmental engineer, business management

Planned Activities:
- Mapping of current legislation for CE;
- Definition of business model approach;
- Creation of team for the business model study;
- Identification of value proposition, key activities and partners;

Company Tutor: Nando Cutarella / Michele Del Grosso

Project under development

Hiring Manager: Massimo Bellachioma

Department: **Supply Chain**

Plant:

❑ Pescara

Name of the Project:

SAP/APO tools optimization (focus on procurement flows and forecast managment)

The Project in detail:

Study of APO / SAP tools to optimize parameters tuning and armonize capacity load of supplier with internal production load

Candidate Profile

Mechanical engineer, facilities engineer, business administration

Planned Activities:

Study of APO/SAP tool concerning procurement activities, develop method and procedure to monitor suppliers load and armonize their production scheduling with finish goods Customer request , tuning of procurement parameters.

Company Tutor: Flavio Napoleone

Project under development

Hiring Manager: Massimo Bellachioma

Department: **Supply Chain**

Plant:
❑ Pescara

Name of the Project: **Internal logistic and Warehouse optimization**

The Project in detail: Study of internal logistic and warehouse activities in order to reduce: space occupied and cost associated (obsolescence, rent for external warehouse, ecc…)

Candidate Profile
Mechanical engineer, facilities engineer, business administration

Planned Activities:
Study of internal logistic and warehouse flows and juxtaposition with internal Logistic Manager

Company Tutor: Daniele Lucci

Project under development

Hiring Manager: Massimo Bellachioma

Department: **Supply Chain**

Plant:
Pescara

Name of the Project: **Freight Cost optimization and intermodal transport**

The Project in detail:
Study of logistic for distribution of goods (shipping) and evaluation of fares applied fron external supplier. Evaluation of economical advantages for intermodal solution (find some new destination)

Candidate Profile
Mechanical engineer, facilities engineer, Business school

Planned Activities:
Study of tools and prodecures adopted in the Shipping Department, Study of fares applied from external vendor and actual intermodal application

Company Tutor: Renata Pietrantoni

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Project under development

Hiring Manager: Massimo Bellachioma

Department: **Supply Chain**

Plant:
Pescara

Name of the Project: **Customer Service tools and flows optimization (focus on TOP CUSTOMERS and in particular L'Oreal)**

The Project in detail: study of method and tools utilized to manage Top Customers in order to optimize them to increse KPI

Candidate Profile (mechanical engineer, facilities engineer,business school)

Planned Activities:
Study of tools and prodecures adopted in the Customer Sales office to manage Top Customer; define some improvement to reduce Lead Time and finish goods in stocks , increase the agility and flexibility. Evaluate the possibility to apply a VMI technique.

Company Tutor: Gianluca Aloisio

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Project under development

Hiring Manager: Rocco Soccio

Department: **Operational Excellence**

Plant:
Chieti, Possible cooperation with other Aptar sites

Name of the Project: **Industry 4.0**

The Project in detail:
Identification and development of new Industry 4.0 applications to improve manufacturing efficiency and performances.

Candidate Profile: Industrial engineer, travelling availability to other Aptar sites.

Planned Activities: scouting of new Industry 4.0 technologies (Smart Glasses, AR, wearable devices, IOT, etc.) and software applications; cost/benefit evaluation, User Requirement Specification definition, development of Proof Of Concept (POC) to validate new solutions.

Company Tutor: Piero Coletti

Project under development

Hiring Manager: Rocco Soccio

Department: **Operational Excellence**

Plant:
Chieti, Possible cooperation with other Aptar sites

Name of the Project: **Manufacturing digital reporting and data analystics**

The Project in detail:
Designing and development of a corporate manufacturing reporting system to control production performances leveraging Industry 4.0 technologies (data-lake, Manufacturing Execution System).

Candidate Profile: Industrial engineer (knowledge of database management system), travelling availability to other Aptar sites.

Planned Activities: data model, standard KPI identification, data analysis, testing of new data analytics platform, scouting of new approaches and technologies (big data, data mining, machine learning).

Company Tutor: Piero Coletti

Project under development

Hiring Manager: Rocco Soccio

Department: **Operational Excellence**

Plant:
Chieti, Possible cooperation with other Aptar sites

Name of the Project: **Manufacturing Execution System**

The Project in detail:
Designing and development of MES functionalities leveraging Industry 4.0 technologies (MES Box, Machines Connectivity, IOT, etc.)

Candidate Profile: Industrial engineer, travelling availability to other Aptar sites.

Planned Activities: standard User Requirement Specification definition, managing of functional development and testing of new IT solutions.

Company Tutor: Piero Coletti

Project under development

Hiring Manager: Rocco Soccio

Department: **Operational Excellence**

Plant:
Chieti, Possible cooperation with other Aptar sites

Name of the Project: **Aptar Operational System (AOS)**

The Project in detail:
Definition and development of a corporate approach to implement the Aptar Operational System

Candidate Profile: Industrial engineer, travelling availability to other Aptar sites.

Planned Activities: development of AOS standard training, AOS auditing system (definition, planning and execution), AOS standard KPIs definition, AOS diagnostic system development to identify and prioritize improvement opportunities, designing and development of AOS best practices sharing platform.

Company Tutor: Piero Coletti

Project under development

Hiring Manager: Bruno Leombruni

Department: **Operational Excellence - BPM**

Plant:
Chieti

Name of the Project: **Analytics applied to advanced planning and optimization**

The Project in detail:
Definition and development of analytics applicationto ptimize production planning

Candidate Profile: Industrial engineer

Planned Activities: definition of proper analytics approach, cooperation with planning department, monitoring system definition

Company Tutor: Alessia Ettorre

Project under development

Hiring Manager: Bruno Leombruni, Rocco Soccio

Department: **Operational Excellence - BPM**

Plant:
Chieti

Name of the Project: **Machine learning applied in manufacturing industry**

The Project in detail:
Definition and development of machine learning models applies to relevant areas for manufacturing industries

Candidate Profile: Industrial engineer

Planned Activities: data analysis, data modeling, model development and testing

Company Tutor: Alessia Ettorre

Project under development

Hiring Manager: Enrico Cantalini

Department: **Engineering**

Plant:
Chieti

Name of the Project: **Manufacturing Intelligence.**

The Project in detail:
Raccolta, analisi e correlazione dei parametri di processo di macchine e stampi/presse (data-lake, data-mining).

Candidate Profile: industrial engineer or Mathematic/Information

Planned Activities: Condivisione delle esperienze di base, studio e verifica dei processi attuali, sperimentazione sul campo (di laboratorio e/o su impianto).

Company Tutor: Luca Di Vincenzo

Project under development

Hiring Manager: Enrico Cantalini

Department: **Engineering**

Plant:
Chieti

Name of the Project: **Sistemi di rilevazione e controllo delle micro differenze di colore.**

The Project in detail:
Analisi e sviluppo di sistemi riconoscimento colore ad alta sensibilità in grado di valutare le piccole variazioni di colore su diverse finiture superficiali e diversi materiali e realizzazione di un impianto pilota.

Candidate Profile: industrial engineer

Planned Activities: Condivisione delle esperienze di base, studio e verifica dei processi attuali, sperimentazione sul campo (di laboratorio e/o su impianto).

Company Tutor: Sara Faraone

Project under development

Hiring Manager: Enrico Cantalini

Department: **Engineering**

Plant:
Chieti

Name of the Project: **Sistemi basati sull'impiego di robot veloci per la alimentazione di piccoli componenti. Studio fattibilità e simulazione di cinematiche alternative agli standard commerciali e implementazione prototipo**

The Project in detail:
Studio di sistemi di alimentazione per piccoli componenti, alternativi ai classici alimentatori a vibrazione o centrifughi, basati sull'uso della visione 2D/3D, per il riconoscimento dei pezzi, e su robot veloci. Proseguimento di un Lavoro precendente"SISTEMA DI ALIMENTAZIONE FLESSIBILE MEDIANTE L'UTILIZZO DI ROBOT E VISIONE 2D". Il progetto ha esplorato l'utilizzo di Robot standard commerciali (es. Scara) che hanno mostrato un limite nelle velocità e, quindi, nel produttività.

Candidate Profile: mechanical/industrial engineer

Planned Activities: Scopo del lavoro è individuare,simulare e implementare cinematiche alternative per incrementare la produttività del sistema di alimentazione.

Company Tutor: Manfredo Di Francescantonio / Luca Di Vincenzo

Project under development

Hiring Manager: Enrico Cantalini

Department: **Engineering**

Plant:
Chieti

Name of the Project: **Visione 2D/3D: possibili applicazioni industriali per la guida robot nell'alimentazione di micropompe / componenti**

The Project in detail:
La computer vision ha visto negli ultimi anni una importante crescita nelle applicazioni non industriali. Esiste una crescenta domanda dell'uso della visione 2D/3D in campo manufacturing con il fine di aumentare la adattabilità e flessibilità delle linee di produzione.

Candidate Profile: Mechanical engineer

Planned Activities: Condivisione delle esperienze di base, studio e verifica dei processi attuali, sperimentazione sul campo (di laboratorio e/o in linea di produzione).

Company Tutor: Manfredo Di Francescantonio / Luca Di Vincenzo

Project under development

Hiring Manager: Enrico Cantalini

Department: **Engineering**

Plant:
Chieti

Name of the Project: **Azionamenti elettrici e pneumatici: misura delle performances e analisi dei dati per azioni di manufacturing intelligence.**

The Project in detail:
Studio e caratterizzazione degli attuatori pneumatici ed elettrici in uso in Aptar Italia. Misura delle performances nel tempo e correlazione dei dati.

Candidate Profile: Mechanical/Industrial engineer

Planned Activities: Condivisione delle esperienze di base, studio e verifica dei processi attuali, sperimentazione sul campo (di laboratorio e/o in linea di produzione).

Company Tutor: Manfredo Di Francescantonio

Project under development

Hiring Manager: Enrico Cantalini

Department: **Engineering**

Plant:
Chieti

Name of the Project: **Sistemi di iniezione a canale caldo: sviluppo di strumenti di simulazione per progettare e valutare gli ugelli.**

The Project in detail:
I sistemi a canale caldo per la distribuzione del fuso all'interno di uno stampo multi cavità rivestono un ruolo fondamentale sulla qualità del manufatto e sul ciclo di produzione. Scopo dello studio è lo sviluppo di un modello di simulazione che permetta di progettare ugelli di tipo custom.

Candidate Profile: Mechanical/Industrial engineer

Planned Activities: Condivisione delle esperienze di base, studio e verifica dei processi attuali, sperimentazione sul campo (di laboratorio e/o in linea di produzione).

Company Tutor: Pica Riccardo

Project under development

Hiring Manager: Enrico Cantalini

Department: **Engineering**

Plant:
Chieti

Name of the Project: **Studio termodinamico di uno stampo per iniezione di materiali termoplastici. Caratterizzazione di uno stampo esistente e possibilità di ottimizzazione.**

The Project in detail:
Modellazione termodinamica di uno stampo per iniezione di HDPE e PP.

Candidate Profile: Mechanical/Industrial engineer

Planned Activities: Condivisione delle esperienze di base, studio e verifica dei processi attuali, sperimentazione sul campo (di laboratorio e/o in linea di produzione).

Company Tutor: Pica Riccardo.

Project under development

Hiring Manager: Enrico Cantalini

Department: **Engineering**

Plant:
Chieti

Name of the Project: **Micro attuatori per sistemi di presa adattabili. Sviluppo e soluzioni alternative della soluzioni trattate nella tesi precedente "Sviluppo di un dispositivo portapezzo adattabile mediante uso di attuatori in lega a memoria di forma“.**

The Project in detail:
Sviluppo e soluzioni alternative della soluzioni trattate nella tesi precedente: "Sviluppo di un dispositivo portapezzo adattabile mediante uso di attuatori in lega a memoria di forma“.

Candidate Profile: Mechanical engineer

Planned Activities: Condivisione delle esperienze di base, studio e verifica dei processi attuali, sperimentazione sul campo (di laboratorio e/o in linea di produzione).

Company Tutor: Manfredo Di Francescantonio

Project under development

Hiring Manager: Enrico Cantalini

Department: **Engineering**

Plant:
Chieti

Name of the Project: **Utilizzo di sensori per il controllo della qualità del manufatto e del processo di uno stampo ad iniezione per materiali termoplastici. Studi alternativi e implementazione su larga scala con sistema Priamus.**

The Project in detail:
Gli stampi ad iniezione possono essere dotati di sensori di pressione e temperatura per il controllo del processo. Come utilizzare al meglio questi dati?

Candidate Profile: Mechanical engineer

Planned Activities: Condivisione delle esperienze di base, studio e verifica dei processi attuali, sperimentazione sul campo (di laboratorio e/o in linea di produzione).

Company Tutor: Pica Riccardo

Project under development

Hiring Manager: Enrico Cantalini

Department: **Engineering**

Plant:
Chieti

Name of the Project: **Macchine di assemblaggio a cinematica continua di nuova generazione.**

The Project in detail:
Sviluppo di soluzioni innovative per le machine di assemblaggio a cinematica continua, partendo dall'analisi dei weak point della tecnologia oggi presente in azienda.

Candidate Profile: Mechanical engineer

Planned Activities: Condivisione delle esperienze di base, studio e verifica dei processi attuali, sperimentazione sul campo (di laboratorio e/o in linea di produzione).

Company Tutor: Manfredo Di Francescantonio

Project under development

Hiring Manager: Enrico Cantalini

Department: **Engineering**

Plant:
Chieti

Name of the Project: **Applicazione dello Statistical Process Control alle macchine di assemblaggio: sviluppo di metodologie alternative basate su parametri discreti.**

The Project in detail:
Metodologia SPC di facile applicazione su parametri di processo continui trova difficile applicazione se i parametri sono di tipo discreto.

Candidate Profile: mechanical engineer

Planned Activities: Condivisione delle esperienze di base, studio e verifica dei processi attuali, sperimentazione sul campo (di laboratorio e/o in linea di produzione).

Company Tutor: Sara Faraone

Project under development

Hiring Manager: Enrico Cantalini

Department: **Engineering**

Plant:
Chieti

Name of the Project: **New automation for Material Handling Optimization: studio e sviluppo di soluzioni automatiche per la gestione e movimentazione dei materiale dal e verso Shop Floor con sistemi di Autonomous Vehicles.**

The Project in detail:
La movimentazione manuale dei materiali nel magazzino accettazione e nel raparto di produzione costituisce un costo nell'area logistica non trascurabile. Scope della tesi è individuare e implementare una soluzione automatica che riduca i costi ma al contempo risulti efficiente e flessibile.

Candidate Profile: mechanical/industrial engineer

Planned Activities: Condivisione delle esperienze di base, studio e verifica dei processi attuali, sperimentazione sul campo (di laboratorio e/o su impianto).

Company Tutor: Luca Di Vincenzo

Project under development

Hiring Manager: Chiara Ferri

Department: Human Resources

Plant:
❑ Chieti

Name of the Project:
<< Human Resources practices in Smart Manufacturing>>

The Project in detail:
The candidate will go through all the activities of the HR department with the purpose of supporting the current alignment of HR processes and procedures to the Smart Manufacturing requirements and trends.

Candidate Profile:
Business Administration

Planned Activities

- Optimization of current practices and activities by mapping and analysing in details the following areas:
  - HR Key Performance Indicators and reports
  - Personnel administration
  - Time&Attendance and Smart Working
  - Human Capital Management processes and systems
  - Training, On-Boarding and Organizational development activities

Company Tutor: Domenico Giangiulio

Aptar beauty+home

Project under development

Hiring Manager:
Andrea Sanvitale

Department:
Global Test Mangement

Plant:
❑ Chieti

Name of the Project
Improve Testing and Monitoring processes

The Project in detail:
- testing methodology
- create activities tasks manually first and then thru automation
- AI + big data in testing
- open source tools

Candidate Profile
Software engineer

Planned Activities:
Introduce the candidate into Aptar methodologies.
Create proof of concepts on the topics
Create real use cases

Company Tutor: Gabriele Di Fazio

Project under development

Hiring Manager:
Andrea Sanvitale, Davide Piccirilli

Department:
Global Test Mangement

Plant:
❑ Chieti

Name of the Project
Industry 4.0

The Project in detail:
Under Industry 4.0 program, create softwares simulators for industrial automations, operational machines

Candidate Profile
Software engineer

Planned Activities:
Introduce the candidate into Aptar methodologies.
Create proof of concepts on the topics
Create real use cases

Company Tutor: Gabriele Di Fazio, Alessandro Di Silvestri

Project under development

Hiring Manager: Santosh Prabhu

Department: IS (Innovation)

Plant:

- ❑ Chieti

Name of the Project: Empowering workforce through mobile apps app with edge technologies

The Project in detail: Implementation of innovative models for the employment of an increasingly diverse workforce, making smart use of flexible forms of work organization in terms of working space and time, can help boost a company's performance while at the same time offering employees improved work-life balance.
Candidates will analyze in detail some of the business and operational functionalities in Aptragroup Inc.
Actually they are executed in a traditional way, sitting in a desk in front a PC or notebook.
Furthermore some of the tasks are not harmonized and require different actions based on the Company facilities.
Through a GAP analysis, we need to underline and verify if it possible to replicate some of these functionalities using edge technologies through a mobile device (Tablet or smartphone)

Candidate Profile : software engineer

Planned Activities: As IS analisys, TO BE analisys. Vendor selection or in-house development of several mobile apps.

Company Tutor: Luca Sozio

Project under development

Hiring Manager: Fabrizio Grisoni
Department: IS (Innovation)
Plant:
Chieti
Name of the Project: IoT & Cloud computing in a manufacturing company
The Project in detail: Cloud computing or "the cloud," involves delivering data, applications, and more over the Internet to data centers. As per IBM definition, cloud computing could be spitted into these 6 categories: Software as a service (SaaS), Platform as a service (PaaS), Infrastructure as a service (IaaS), Public Cloud, Private Cloud, Hybrid Cloud.
The Internet of Things, meanwhile, refers to the connection of devices (computers, matphones, sensors and so on) to the Internet.
Cloud computing and the IoT both serve to increase efficiency in our everyday tasks, and the two have a complimentary relationship. The IoT generates massive amounts of data, and cloud computing provides a pathway for that data to travel to its destination. Actually, these data are gathered and collected into local servers for analysis and elaborations. Candidates will analyze in detail some of the business and operational functionalities in one facility of our organizations. The goal of the project will be to build a pilot, that can be then replicated in all other company facilities.
Through a GAP analysis, we need to underline and verify if it possible to using some Cloud services to accomplish some of the organizational daily tasks. Focus will points out on real advantages and benefits for the company:
Expense and economies of scale
Infrastructure capacity needs
Speed and agility to deploy and in making resources available to developers
Savings on operating data centers
Candidate Profile : software engineer
Planned Activities: AS IS analisys, TO BE analisys. Cloud computing platforms selection (Amazon Cloud Platform, Azure Cloud Platform and so on), IoT hardware selections, third party software analisys or in house development of interfaces between IoT devices and Cloud platforms.
Company Tutor: Luca Sozio